Modification to Approved Project

City of Rochester, New Hampshire

Case # 137-35-1-HC-21 Property Address 29 Wadleigh Road, Rochester, NH

Type of project: Site Plan_____; Subdivision_____; Line Adjustment_____; Other X

Original Project Description: 52 unit market-rate apartment building at 29 Wadleigh Road

Date of original Planning Board approval April 4, 2022

Description of modification:
Changing 52 unit Market-Rate apartment building into 52 unit affordable apartment building; see owner-provided narrative for all building and site alterations as part of changing product type

**Please attach a plan showing the amendment location and/or details.

Applicant Name: Matt Menning

Mailing Address 200 Technology Drive, Hooksett, NH 03106

Phone Number: 603-837-6233 Email Address: mmenning@elmgrovecompanies.com

Please note: *Modifications are reviewed by City Staff but no public hearing is held and no notices are required. (In contrast, projects, which are considered to have a potential impact upon abutters, are considered Amendments for which notice and a public hearing is required.) There is a $125.00 fee for a modification.*

Name of applicant or agent filling out this form Matthew G Menning, Manager Duly Authorized, Elm Grove Realty, LLC

Please check box: Applicant ☐ Agent ☒

Signature of person completing form: Matthew G Menning Date: 3/25/24

Signature of property owner (if different): Fenton Groves Date: 3/28/24

March 15, 2024

Shanna B Saunders
Planning Director
City of Rochester
33 Wakefield Street
Rochester, NH 03867

RE: Wadleigh Road Apartments | Rapids at Cocheco – Building Plan Change Narrative

Elm Grove Companies is purchasing the 8.4 acres at 29 Wadleigh Road in Rochester, NH and plans to deliver 52 workforce housing apartments on the site. The site plan is currently approved for 52 apartments, which were prior planned to be market-rate. As a result of program change from market rate apartments to workforce tax-credit apartments, there are some changes in the plans outlined herein.

The current owner planned and received approval for a building designed with insulated concrete forms, a building type with which Elm Grove Companies is not familiar; additionally our studies indicate this construction methodology is also not conducive to affordable housing financially. Elm Grove is instead building with traditional wood construction which minimally impacts the building footprint.

The footprint changes (indicated in the attached exhibit – see sheet C3) are primarily programmatic changes from the market rate apartments to the affordable apartments.

- The original approval consisted of
  - (18) 1 bedroom 1 bath units
  - (34) 2 bedroom 2 bath units
  - Average SF per unit of 974
- While the new program is
  - (14) 1 bedroom 1 bath units
  - (38) 2 bedroom 1 bath units.
  - Average SF per unit 819

Reductions in the footprint range from 2.7 feet up to over 16 feet depending on the location (exhibit sheet C3); overall length of the building has been reduced by approximately 10 feet. The building height is reduced from a peak of 37’-10” to 32’-10” (see attached elevations for approved building heights compared to the new building height).

Elm Grove went with a new color scheme as well (see attached renderings) to better connect the building with the surrounding nature. On March 14th, we provided color swatches for the City's review; the colors are indicated on the elevations and renderings.

Elm Grove is building with Passive House construction principles on this project, and as such, removed balconies from the project as they are the largest impediment to a tight building envelope.

Replacing that exterior space as a community amenity is important to Elm Grove. We are planning the following (see attached exhibits for more detailed information):

- an exterior patio space with BBQ grills and benches that look over the Cocheco River
- open picnic/play area looking over the Cocheco River
- accessible dog park

The patio space overlooking the river is accessible directly from the ground floor of the building as well as via walkways from the community grounds. The dog park and picnic areas are on the south side of the building adjacent to the existing cell tower accessible directly across from the building's main entry.

Elm Grove is also adding a solar power array to the roof (under 100kW) which will aid in our pursuit of lowering our energy consumption footprint. The previous development did not have any supplemental power in their plans.

Sincerely,

Matt Menning
Principal and Head of Operations
Elm Grove Companies
mmenning@elmgrovecompanies.com
603-381-6336

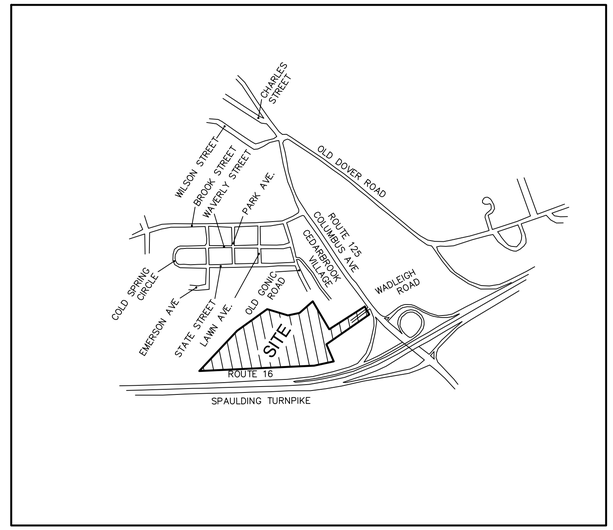
RESIDENTIAL DEVELOPMENT
"WADLEIGH ROAD APARTMENTS"
TAX MAP 137, LOT 35-1
WADLEIGH ROAD, ROCHESTER, NH

GENERAL LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINES
		SETBACK LINES
		CENTERLINE
		FRESHWATER WETLANDS LINE
		STREAM CHANNEL
		TREE LINE
		STONEWALL
		FENCE
		SOIL BOUNDARY
		FLOOD PLAIN LINE
		EASEMENT
100	100	MAJOR CONTOUR
98	98	MINOR CONTOUR
VSC	VSC	EDGE OF PAVEMENT
SGC	SGC	VERTICAL GRANITE CURB
X	X	SLOPE GRANITE CURB
D		SILT FENCE
S	S	DRAINAGE LINE
		SEWER LINE
		GAS LINE
		WATER LINE
		WATER SERVICE
		OVERHEAD ELECTRIC
		UNDERGROUND ELECTRIC
		GUARDRAIL
		UNDERDRAIN
		FIRE PROTECTION LINE
		THRUST BLOCK
		IRON PIPE/IRON ROD
		DRILL HOLE
		IRON ROD/DRILL HOLE
		STONE/GRANITE BOUND
100.00	100.00	PAVEMENT SPOT GRADE
		BENCHMARK (TBM)
		DOUBLE POST SIGN
		SINGLE POST SIGN
TP.1		TEST PIT
		FAILED TEST PIT
M	M	MONITORING WELL
		TREES AND BUSHES
		UTILITY POLE
		LIGHT POLES
		DRAIN MANHOLE
		SEWER MANHOLE
		HYDRANT
		WATER GATE
		WATER SHUT OFF
		REDUCER
		SINGLE GRATE CATCH BASIN
		DOUBLE GRATE CATCH BASIN
		TRANSFORMER
		CULVERT W/WINGWALLS
		CULVERT W/FLARED END SECTION
		CULVERT W/STRAIGHT HEADWALL
		STONE CHECK DAM
		DRAINAGE FLOW DIRECTION
		WETLAND IMPACT
		RIPRAP
		OPEN WATER
		FRESHWATER WETLANDS STABILIZED CONSTRUCTION ENTRANCE
		CONCRETE
		GRAVEL
		SNOW STORAGE
		RETAINING WALL

SHEET INDEX

CS	COVER SHEET
OVR EX	OVERVIEW EXISTING CONDITIONS PLAN
C1-C2	EXISTING CONDITIONS PLAN
OVR S	OVERVIEW SITE PLAN
C3-C4	SITE PLAN
C5-C6	GRADING AND DRAINAGE PLAN
C7	EROSION CONTROL PLAN
P1-P2	ROAD PLAN AND PROFILE
P3-P4	SEWER PROFILE
U1-U2	UTILITY PLAN
L1	LANDSCAPE PLAN
L2-L3	LIGHTING PLAN
D1-D5	DETAIL SHEETS
D6	SELECT CROSS SECTIONS
E1	EROSION AND SEDIMENT CONTROL DETAILS
T1	TRUCK TURNING PLAN



LOCUS MAP
SCALE 1" = 1000'

PERMITS

TYPE OF PERMIT	STATUS	TYPE OF PERMIT	STATUS
NHDES ALTERATION OF TERRAIN PERMIT: NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES - WATER DIVISION 29 HAZEN DRIVE, P.O. BOX 95 CONCORD, NEW HAMPSHIRE 03302-0095 (603) 271-3503 RESPONSIBLE CONSULTANT: JONES & BEACH ENGINEERS, INC.	PERMIT NO. AoT-2182 DATED: JUNE 28, 2022 EXPIRATION: JUNE 28, 2027	**NHDES SEWER CONNECTION PERMIT:** NHDES - WASTEWATER ENGINEERING BUREAU 29 HAZEN DRIVE, P.O. BOX 95 CONCORD, NEW HAMPSHIRE 03302-0095 (603) 271-3503 RESPONSIBLE CONSULTANT: JONES & BEACH ENGINEERS, INC.	SUBMITTED: PERMIT NO. DATED: EXPIRATION:
NHDOT DRIVEWAY PERMIT: NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, DISTRICT SIX P.O. BOX 740 DURHAM, NEW HAMPSHIRE 03824 (603) 868-1133 RESPONSIBLE CONSULTANT- JONES & BEACH ENGINEERS, INC.	PERMIT NO. 06-389-654 DATED: APRIL 7, 2022	USEPA NPDES PHASE II CONSTRUCTION GENERAL PERMIT, NOTICE OF INTENT (NOI), AND NOTICE OF TERMINATION (NOT) TO BE FILED IN ACCORDANCE WITH FEDERAL AND LOCAL REGULATIONS PRIOR TO AND FOLLOWING CONSTRUCTION: EPA STORMWATER NOTICE PROCESSING CENTER MAIL CODE 4203M, US EPA 1200 PENNSYLVANIA AVENUE, NW WASHINGTON, DC 20460 RESPONSIBLE CONSULTANT: JONES & BEACH ENGINEERS, IN	
NHDES WETLAND PERMIT: NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES-WETLANDS BUREAU 29 HAZEN DRIVE, P.O. BOX 95 CONCORD, NEW HAMPSHIRE 03302 (603) 271-2147 RESPONSIBLE CONSULTANT- JONES & BEACH ENGINEERS, INC.	PERMIT NO. 2022-00563 DATED: APRIL 26, 2022 EXPIRATION: APRIL 26, 2027		

NEW HAMPSHIRE FISH AND GAME AOT PERMIT CONDITIONS RELATED TO THREATENED AND ENDANGERED SPECIES

- ALL OBSERVATIONS OF THREATENED OR ENDANGERED SPECIES SHALL BE REPORTED IMMEDIATELY TO THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT 603–271–2461 AND BY EMAIL AT NHFGREVIEW@WILDLIFE.NH.GOV. EMAIL SUBJECT LINE: NHB21–2937, WADLEIGH ROAD, WILDLIFE SPECIES OBSERVATION.
- PHOTOGRAPHS OF THE OBSERVED SPECIES AND NEARBY ELEMENTS OF HABITAT OR AREAS OF LAND DISTURBANCE SHALL BE PROVIDED TO NHF&G IN DIGITAL FORMAT AT THE ABOVE EMAIL ADDRESS FOR VERIFICATION AS FEASIBLE;
- IN THE EVENT A THREATENED OR ENDANGERED SPECIES IS OBSERVED ON THE PROJECT SITE DURING THE TERM OF THE PERMIT, THE SPECIES SHALL NOT BE DISTURBED, HANDLED, OR HARMED IN ANY WAY PRIOR TO CONSULTATION WITH NHF&G AND IMPLEMENTATION OF CORRECTIVE ACTIONS RECOMMENDED BY NHF&G, IF ANY, TO ASSUME THE PROJECT DOES NOT APPRECIABLY JEOPARDIZE THE CONTINUED EXISTENCE OF THREATENED AND ENDANGERED SPECIES AS DEFINED IN FIS 1002.04.
- THE NHF&G, INCLUDING ITS EMPLOYEES AND AUTHORIZED AGENTS, SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT

CIVIL ENGINEER / SURVEYOR
JONES & BEACH ENGINEERS, INC.
85 PORTSMOUTH AVENUE
PO BOX 219
STRATHAM, NH 03885
(603) 772-4746
CONTACT: BRAD JONES
EMAIL: BJONES@JONESANDBEACH.COM

TRAFFIC ENGINEER
STEPHEN G. PERNAW & COMPANY, INC.
P.O. BOX 1821
CONCORD, NH 03302
(603) 731-8500
CONTACT: STEPHEN G. PERNAW
EMAIL: SGP@PERNAW.COM

WETLAND CONSULTANT
GOVE ENVIRONMENTAL SERVICES, INC.
8 CONTINENTAL DR., BUILDING 2, UNIT H
EXETER, NH 03833-7526
(603) 778-0644
CONTACT: JAMES GOVE
EMAIL: JGOVE@GESINC.BIZ

LANDSCAPE DESIGNER
LM LAND DESIGN, LLC
11 SOUTH ROAD
BRENTWOOD, NH 03833
(603) 770-7728
CONTACT: LISE McNAUGHTON
LMLANDDESIGN@GMAIL.COM

WATER AND SEWER
ROCHESTER DEPARTMENT OF PUBLIC WORKS
45 OLD DOVER ROAD
ROCHESTER, NH 03867
(603) 332-4096
CONTACT: MICHAEL BEZANSON, P.E.

ELECTRIC
EVERSOURCE ENERGY
74 OLD DOVER ROAD
ROCHESTER, NH 03867
(603) 332-7507
CONTACT: PIERRE BOUGIE
N
LMLANDDESIGN@GMAIL.COM

TELEPHONE
CONSOLIDATED COMMUNICATIONS
1575 GREENLAND ROAD
GREENLAND, NH 03840
(603) 427-5525
CONTACT: JOE CONSIDINE

CABLE TV
COMCAST COMMUNICATION CORPORATION
334-B CALEF HIGHWAY
EPPING, NH 03042-2325
(603) 679-5695

NATURAL GAS
UNITIL SERVICE CORP.
325 WEST ROAD
PORTSMOUTH, NH 03801
(603) 294-5261
MACLEAND@UNITIL.COM

PROJECT PARCEL	CITY OF -ROCHESTER TAX MAP 137, LOT 35-1
APPLICANT	GROEN CONSTRUCTION 120 WASHINGTON STREET SUITE 302 ROCHESTER NH 03839
TOTAL LOT AREA	8.4 ACRES±

APPROVED - ROCHESTER, NH
PLANNING BOARD

DATE:

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: AS NOTED	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	COVER SHEET
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
CS
SHEET 1 OF 29
JBE PROJECT NO. 21137

PROJECT NAME AND LOCATION
JBE #21137 REVISION 11/21/24

LOCUS SCALE: 1"=1000'

EXISTING CONDITIONS NOTES:

1. THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS AND BOUNDARY ON TAX MAP 137, LOT 35-1. EXISTING CONDITIONS SURVEY WAS PERFORMED IN AUGUST THROUGH NOVEMBER, 2021.
2. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC., NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 1-888-DIG-SAFE (1-888-344-7233).
3. SUBJECT PROPERTY IS PARTIALLY LOCATED WITHIN FEDERALLY DESIGNATED 100 YEAR FLOOD HAZARD ZONE. REFERENCE FEMA COMMUNITY PANEL NO. 33017 C0211D, DATED MAY 17, 2005.
4. THE LIMITS OF JURISDICTIONAL WETLANDS WERE DELINEATED BY GOVE ENVIRONMENTAL DURING SUMMER, 2021, USING (EQUIPMENT) AND IN ACCORDANCE WITH THE FOLLOWING GUIDANCE DOCUMENTS:
   - A. THE CORPS OF ENGINEERS FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING JURISDICTIONAL WETLANDS.
   - B. THE NORTH CENTRAL & NORTHEAST REGIONAL SUPPLEMENT TO THE FEDERAL MANUAL.
   - C. THE CURRENT VERSION OF THE FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, AS PUBLISHED BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION AND/OR THE CURRENT VERSION OF THE FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, AS PUBLISHED BY THE USDA, NRCS, AS APPROPRIATE.
   - D. THE CURRENT NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS, AS PUBLISHED BY THE US FISH AND WILDLIFE SERVICE.
7. A TEMPORARY CULVERT AND ROADBED SHALL BE IN PLACE PRIOR TO ANY USE OF A WETLAND CROSSING.
8. WETLAND IMPACTS SHALL NOT OCCUR UNTIL ALL PERMITS HAVE BEEN ACQUIRED AND IMPACT MITIGATION REQUIREMENTS HAVE BEEN SATISFIED.
9. TEST PITS PERFORMED BY GOVE ENVIRONMENTAL SERVICES, INC., 10/1/21.
10. WETLAND BOUNDARIES AND CONSTRUCTION LIMITS ARE TO BE CLEARLY MARKED PRIOR TO THE START OF CONSTRUCTION.
11. BASIS OF BEARING: HORIZONTAL – SPCS NH. VERTICAL – NAVD 88.
12. CERTAIN DATA HEREON MAY VARY FROM RECORDED DATA DUE TO DIFFERENCES IN DECLINATION, ORIENTATION, AND METHODS OF MEASUREMENT.
13. ALL BOOK AND PAGE NUMBERS REFER TO THE STRAFFORD COUNTY REGISTRY OF DEEDS.
14. THE TAX MAP AND LOT NUMBERS ARE BASED ON THE TOWN OF ROCHESTER TAX RECORDS AND ARE SUBJECT TO CHANGE.
15. RESEARCH WAS PERFORMED AT THE TOWN OF ROCHESTER ASSESSOR'S OFFICE AND THE STRAFFORD COUNTY REGISTRY OF DEEDS.
16. THIS SURVEY IS NOT A CERTIFICATION TO OWNERSHIP OR TITLE OF LANDS SHOWN. OWNERSHIP AND ENCUMBRANCES ARE MATTERS OF TITLE EXAMINATION NOT OF A BOUNDARY SURVEY. THE INTENT OF THIS PLAN IS TO RETRACE THE BOUNDARY LINES OF DEEDS REFERENCED HEREON. OWNERSHIP OF ADJOINING PROPERTIES IS ACCORDING TO ASSESSOR'S RECORDS. THIS PLAN MAY OR MAY NOT INDICATE ALL ENCUMBRANCES EXPRESSED, IMPLIED OR PRESCRIPTIVE.
17. ANY USE OF THIS PLAN AND OR ACCOMPANYING DESCRIPTIONS SHOULD BE DONE WITH LEGAL COUNSEL, TO BE CERTAIN THAT TITLES ARE CLEAR, THAT INFORMATION IS CURRENT, AND THAT ANY NECESSARY CERTIFICATES ARE IN PLACE FOR A PARTICULAR CONVEYANCE, OR OTHER USES.
15. THIS PLAN IS THE RESULT OF A CLOSED TRAVERSE WITH A RAW, UNADJUSTED LINEAR ERROR OF CLOSURE GREATER THAN 1 IN 15,000.
16. SURVEY TIE LINES SHOWN HEREON ARE NOT BOUNDARY LINES. THEY SHOULD ONLY BE USED TO LOCATE THE PARCEL SURVEYED FROM THE FOUND MONUMENTS SHOWN AND LOCATED BY THIS SURVEY.
17. THE EDGE OF BROOK AS SHOWN HEREON WAS HELD PER RECORD PLAN REFERENCE #1 AND DEED, HOWEVER RIPARIAN RIGHTS MAY EXTEND TO THE CENTER OF SAID BROOK.

PLAN REFERENCES:

1. ."PLAN OF LAND PARCEL NO. 5 TAX ASSESSOR'S MAP NO. 59 AND PARCEL NO. 2 TAX ASSESSOR'S MAP NO. 8 NEW HAMPSHIRE ROUTE 125 PREPARED FOR JEN-SCOT REALTY, INC"; PREPARED BY CIVILWORKS ENGINEERS AND SURVEYORS; DATED NOVEMBER 8, 1989 RECORDED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS AS PLAN P37A-028.
2. "CEDARBROOK VILLAGE CONDOMINIUM DEVELOPMENT BOUNDARY SURVEY FOR ROUNDHOUSE REALTY TRUST ROCHESTER, NH"; PREPARED BY BERRY CONST. CO., INC.; DATED APRIL 23, 1986; RECORDED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS AS PLAN P23-059.
3. "THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, RIGHT-OF-WAY PLANS, PROJECT NO. 10620-D, SPAULDING TURNPIKE, NH ROUTE 16" BY STANTEC, SCALE 1"=50', DATED JANUARY 11, 2011, PLAN 10620-D ON FILE AT THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

SOIL NOTES:

THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED FOR INFILTRATION REQUIREMENTS BY THE NH DES ALTERATION OF TERRAIN BUREAU. IT WAS PRODUCED BY A PROFESSIONAL SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCES CONSERVATION SERVICE. THERE IS A REPORT THAT ACCOMPANIES THIS MAP.

THE SITE SPECIFIC SOIL SURVEY (SSSS) WAS PRODUCED NOVEMBER 2, 2021, AND WAS PREPARED BY JAMES P. GOVE, CSS # 004, GOVE ENVIRONMENTAL SERVICES, INC. THE SURVEY AREA IS LOCATED AT 29 WADLEIGH ROAD, ROCHESTER, NH.

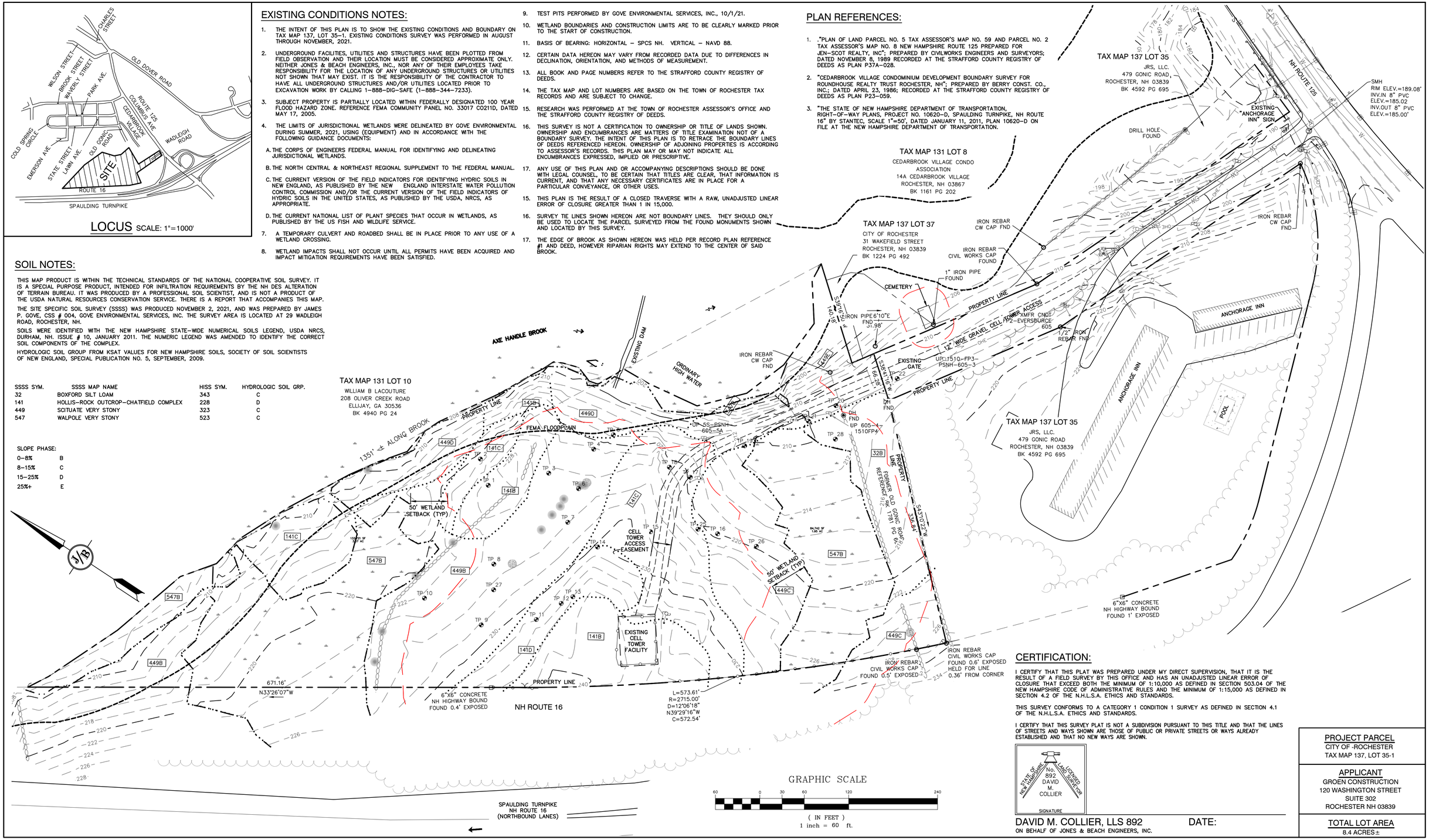
SOILS WERE IDENTIFIED WITH THE NEW HAMPSHIRE STATE-WIDE NUMERICAL SOILS LEGEND, USDA NRCS, DURHAM, NH. ISSUE # 10, JANUARY 2011. THE NUMERIC LEGEND WAS AMENDED TO IDENTIFY THE CORRECT SOIL COMPONENTS OF THE COMPLEX.

HYDROLOGIC SOIL GROUP FROM KSAT VALUES FOR NEW HAMPSHIRE SOILS, SOCIETY OF SOIL SCIENTISTS OF NEW ENGLAND, SPECIAL PUBLICATION NO. 5, SEPTEMBER, 2009.

SSSS SYM.	SSSS MAP NAME	HISS SYM.	HYDROLOGIC SOIL GRP.
32	BOXFORD SILT LOAM	343	C
141	HOLLIS-ROCK OUTCROP-CHATFIELD COMPLEX	228	D
449	SCITUATE VERY STONY	323	C
547	WALPOLE VERY STONY	523	C

SLOPE PHASE:

0-8%	B
8-15%	C
15-25%	D
25%+	E



CERTIFICATION:

I CERTIFY THAT THIS PLAT WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN UNADJUSTED LINEAR ERROR OF CLOSURE THAT EXCEED BOTH THE MINIMUM OF 1:10,000 AS DEFINED IN SECTION 503.04 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES AND THE MINIMUM OF 1:15,000 AS DEFINED IN SECTION 4.2 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

THIS SURVEY CONFORMS TO A CATEGORY 1 CONDITION 1 SURVEY AS DEFINED IN SECTION 4.1 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

STATE OF NEW HAMPSHIRE No. 892 DAVID M. COLLIER LICENSED LAND SURVEYOR
SIGNATURE

DAVID M. COLLIER, LLS 892 DATE:
ON BEHALF OF JONES & BEACH ENGINEERS, INC.

PROJECT PARCEL
CITY OF -ROCHESTER
TAX MAP 137, LOT 35-1

APPLICANT
GROEN CONSTRUCTION
120 WASHINGTON STREET
SUITE 302
ROCHESTER NH 03839

TOTAL LOT AREA
8.4 ACRES±

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

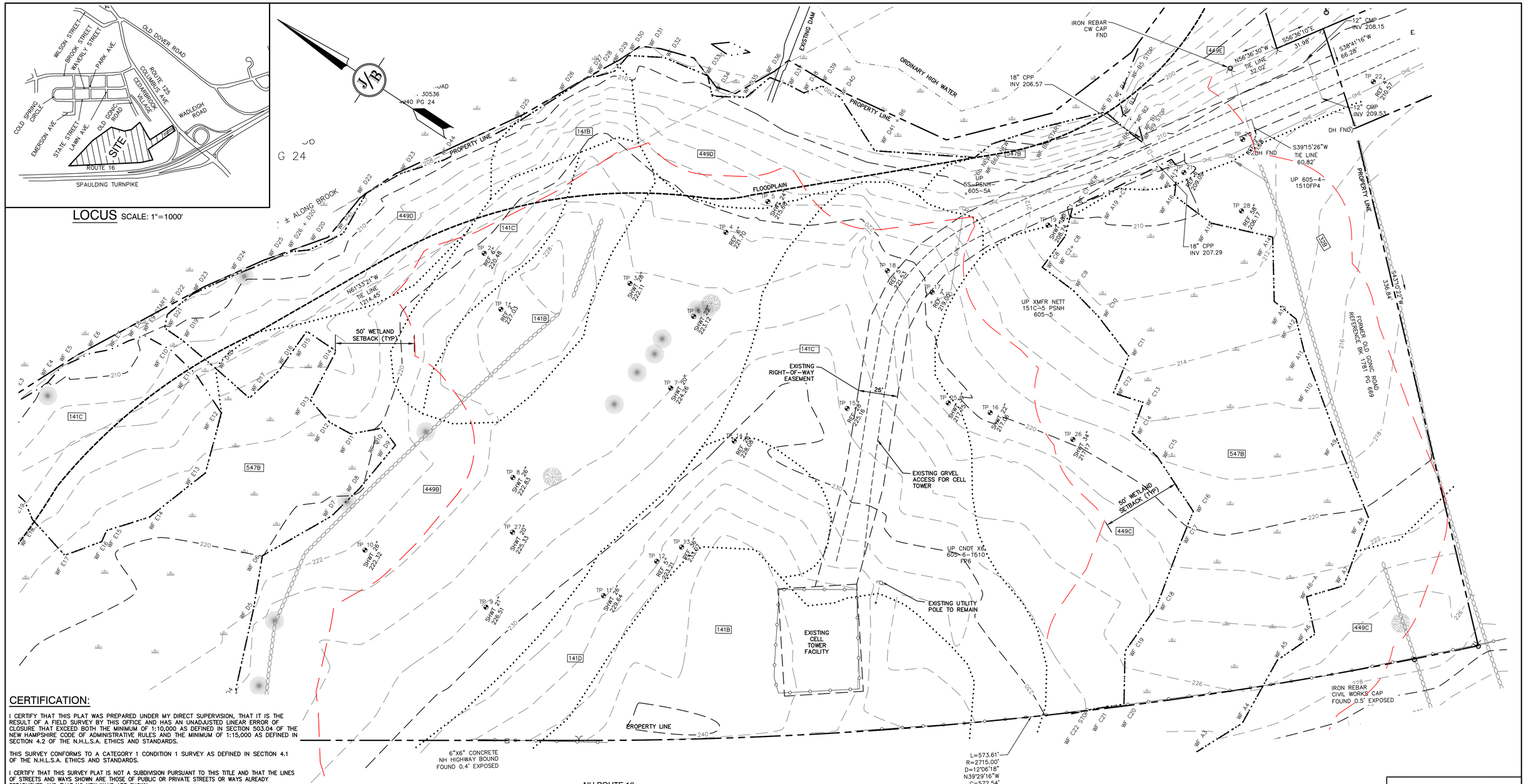
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: EXISTING CONDITIONS OVERVIEW PLAN
Project: WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record: SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
OVR EX
SHEET 2 OF 29
JBE PROJECT NO. 21137



CERTIFICATION:

I CERTIFY THAT THIS PLAT WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN UNADJUSTED LINEAR ERROR OF CLOSURE THAT EXCEED BOTH THE MINIMUM OF 1:10,000 AS DEFINED IN SECTION 503.04 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES AND THE MINIMUM OF 1:15,000 AS DEFINED IN SECTION 4.2 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

THIS SURVEY CONFORMS TO A CATEGORY 1 CONDITION 1 SURVEY AS DEFINED IN SECTION 4.1 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

STATE OF NEW HAMPSHIRE
No. 892
DAVID M. COLLIER
LICENSED LAND SURVEYOR
SIGNATURE

DAVID M. COLLIER, LLS 892 DATE:
ON BEHALF OF JONES & BEACH ENGINEERS, INC.

PROJECT PARCEL
CITY OF -ROCHESTER
TAX MAP 137, LOT 35-1

APPLICANT
GROEN CONSTRUCTION
120 WASHINGTON STREET
SUITE 302
ROCHESTER NH 03839

TOTAL LOT AREA
8.4 ACRES±

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

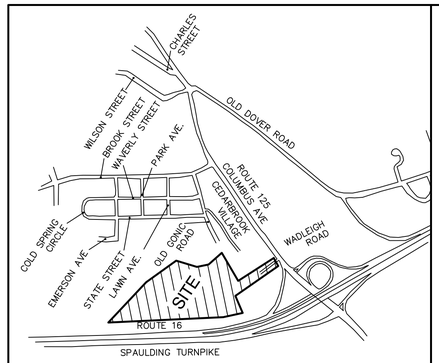
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

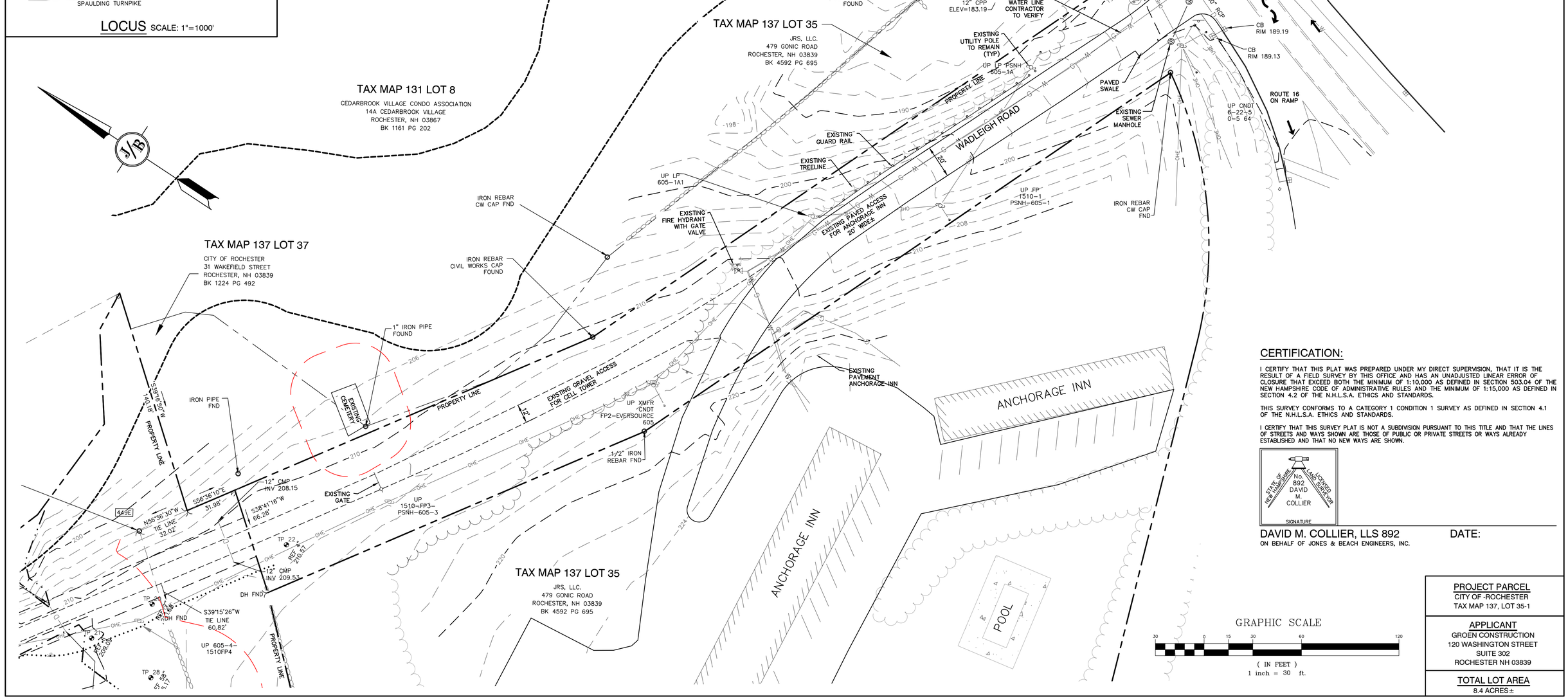
Designed and Produced in NH
J/B Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: EXISTING CONDITIONS PLAN
Project: WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record: SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
C1
SHEET 3 OF 29
JBE PROJECT NO. 21137



LOCUS SCALE: 1"=1000'



CERTIFICATION:

I CERTIFY THAT THIS PLAT WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN UNADJUSTED LINEAR ERROR OF CLOSURE THAT EXCEED BOTH THE MINIMUM OF 1:10,000 AS DEFINED IN SECTION 503.04 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES AND THE MINIMUM OF 1:15,000 AS DEFINED IN SECTION 4.2 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

THIS SURVEY CONFORMS TO A CATEGORY 1 CONDITION 1 SURVEY AS DEFINED IN SECTION 4.1 OF THE N.H.L.S.A. ETHICS AND STANDARDS.

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

STATE OF NEW HAMPSHIRE
No. 892
DAVID M. COLLIER
LICENSED LAND SURVEYOR
SIGNATURE

DAVID M. COLLIER, LLS 892 DATE:
ON BEHALF OF JONES & BEACH ENGINEERS, INC.

PROJECT PARCEL
CITY OF -ROCHESTER
TAX MAP 137, LOT 35-1

APPLICANT
GROEN CONSTRUCTION
120 WASHINGTON STREET
SUITE 302
ROCHESTER NH 03839

TOTAL LOT AREA
8.4 ACRES±

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

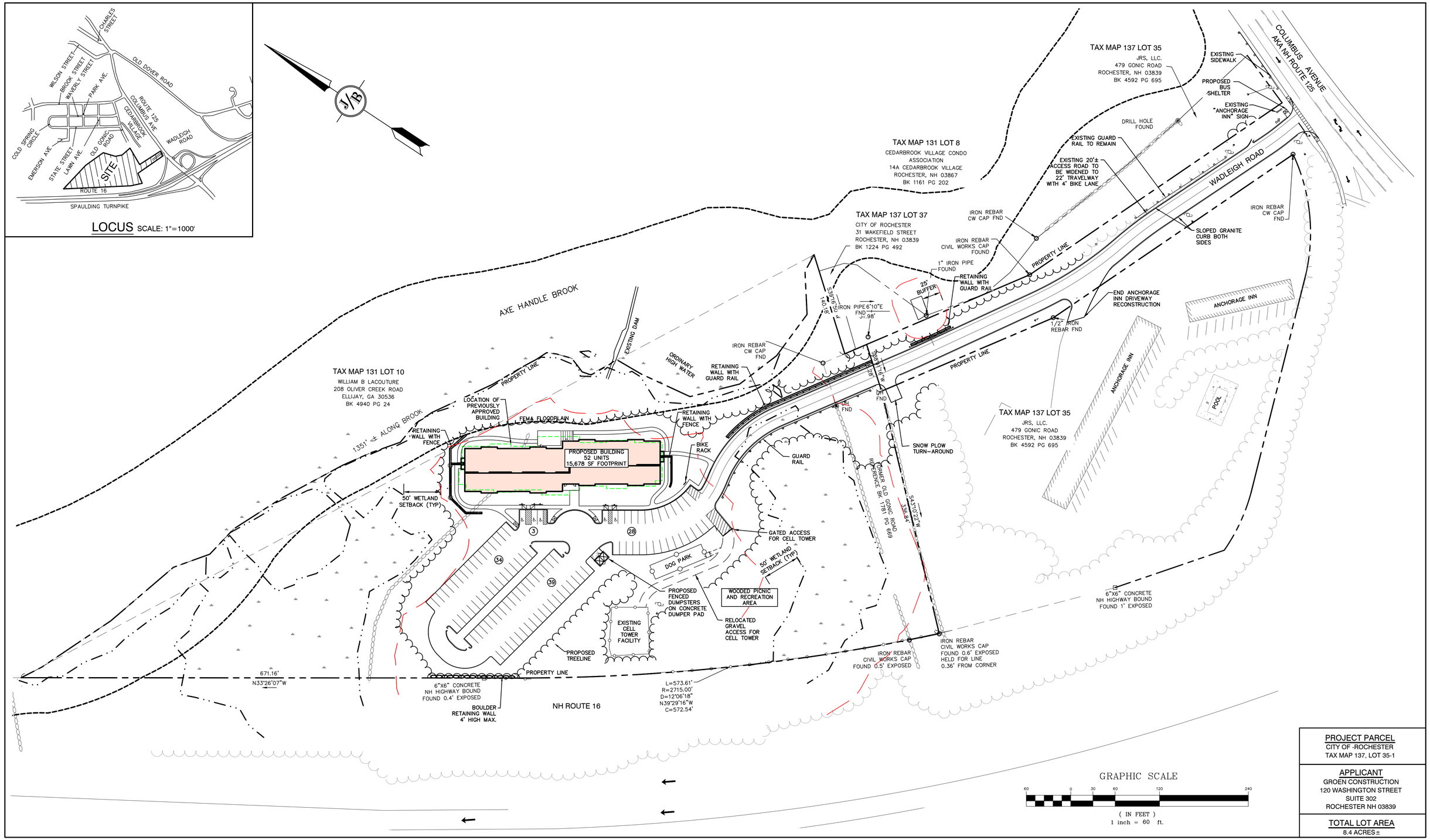
Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: EXISTING CONDITIONS PLAN

Project: WADLEIGH ROAD APARTMENTS
ROCHESTER, NH

Owner of Record: SSG, LLC ATTN: FENTON GROEN
120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
C2



PROJECT PARCEL
CITY OF -ROCHESTER
TAX MAP 137, LOT 35-1

APPLICANT
GROEN CONSTRUCTION
120 WASHINGTON STREET
SUITE 302
ROCHESTER NH 03839

TOTAL LOT AREA
8.4 ACRES±

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

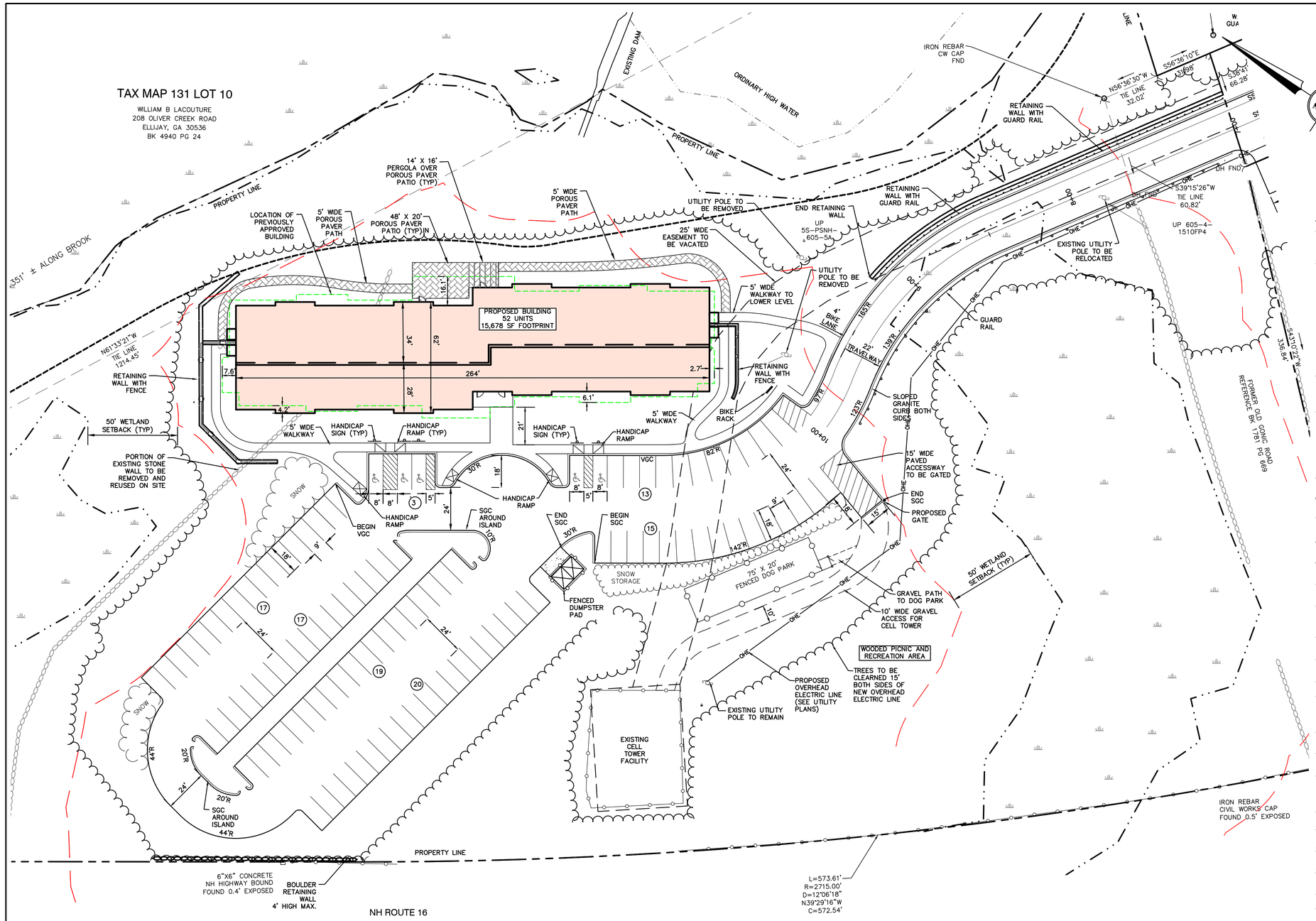
Designed and Produced in NH
J/B Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

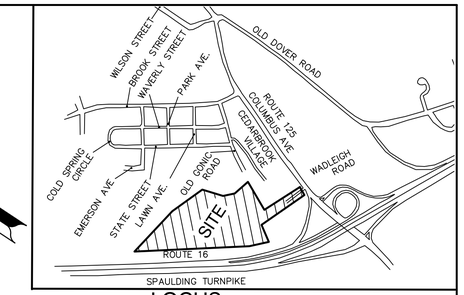
Plan Name: OVERVIEW SITE PLAN

Project: WADLEIGH ROAD APARTMENTS
ROCHESTER, NH

Owner of Record: SSG, LLC ATTN: FENTON GROEN
120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
OVRS
SHEET 5 OF 29
JBE PROJECT NO. 21137





LOCUS SCALE: 1"=1000'

SITE NOTES:

1. THE INTENT OF THIS PLAN IS TO SHOW A LAYOUT FOR A FIFTY-TWO (52) UNIT APARTMENT COMPLEX ON TAX MAP 137, LOT 35-1. ACCESS FOR THE SITE WILL BE FROM WADLEIGH ROAD. PROJECT TO BE SERVED BY ELECTRIC, MUNICIPAL SEWER & PUBLIC WATER.

2. ZONING DISTRICT: HIGHWAY COMMERCIAL
   LOT AREA MINIMUM = 20,000 SF
   LOT FRONTAGE MINIMUM = 100'
   LOT AREA PER DWELLING UNIT = 7,500 SF
   BUILDING SETBACKS
   - FRONT SETBACK = 20'
   - SIDE SETBACK = 10'
   - REAR SETBACK = 25'
   - WETLAND SETBACK = 50
   PAVEMENT SETBACKS
   - FRONT SETBACK = 10'
   - SIDE SETBACK = 5'
   - REAR SETBACK = 10'
   MAX. LOT COVERAGE = 85%

3. PARKING CALCULATIONS:
   TOTAL NUMBER OF UNITS = 52.
   2 SPACES PER UNIT = 104 SPACES REQUIRED
   SPACES PROVIDED = 104 SPACES (INCLUDING 5 HANDICAP ACCESSIBLE SPACES)

4. THIS PLAN SET HAS BEEN PREPARED BY JONES & BEACH ENGINEERS, INC., FOR MUNICIPAL AND STATE APPROVALS BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS AND LIDAR CONTOUR INFORMATION. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA AS SHOWN ON THE DESIGN PLANS, INCLUDING ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS ON THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS, MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED. CONTRACTOR TO ALWAYS CONTACT DIG SAFE PRIOR TO DIGGING ONSITE OR OFFSITE TO ENSURE SAFETY AND OBEY THE LAW.

5. ALL CONSTRUCTION SHALL CONFORM TO CITY STANDARDS AND REGULATIONS, AND NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.

6. SUBJECT PROPERTY IS PARTIALLY LOCATED WITHIN FEDERALLY DESIGNATED 100 YEAR FLOOD HAZARD ZONE A. REFERENCE FEMA COMMUNITY PANEL NO. 33017 C0211D, DATED MAY 17, 2005.

7. LANDOWNERS ARE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING PERMITTING REQUIRED UNDER THESE REGULATIONS.

8. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.). THIS DOCUMENT IS TO BE KEPT ONSITE AT ALL TIMES AND UPDATED AS REQUIRED.

9. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.

10. ALL PROPOSED SIGNAGE SHALL CONFORM WITH THE TOWN ZONING REGULATIONS, UNLESS A VARIANCE IS OTHERWISE REQUESTED.

11. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AND NHDOT STANDARDS AND SPECIFICATIONS (NON-REFLECTORIZED PAVEMENT MARKINGS), UNLESS OTHERWISE NOTED.

12. ALL PARKING STALLS SHALL BE SEPARATED USING 4" WIDE SOLID STRIPES. STRIPING SHALL BE 100% ACRYLIC TYPE, LOW VOC, FAST DRYING, IN A COLOR OF WHITE.

13. ALL STOP BARS SHALL BE 18" IN WIDTH IN A COLOR OF WHITE; ALL TRAFFIC ARROWS SHALL BE PAINTED IN A COLOR OF WHITE.

14. ALL CURBING TO BE SLOPED GRANITE WITH A MINIMUM RADIUS OF 2', UNLESS OTHERWISE NOTED.

15. ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PROVIDED BY THE OWNER. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND OWNER PRIOR TO THE START OF CONSTRUCTION. BUILDING DIMENSIONS AND AREAS TO BE TO OUTSIDE OF MASONRY, UNLESS OTHERWISE NOTED.

16. SNOW TO BE STORED AT EDGE OF PAVEMENT AND IN AREAS SHOWN ON THE PLANS, OR TRUCKED OFFSITE TO AN APPROVED SNOW DUMPING LOCATION.

17. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.

18. THE FOLLOWING VARIANCES HAVE BEEN RECEIVED BY THE CITY OF ROCHESTER ZONING BOARD OF ADJUSTMENT:
    - SECTION 275-20.2.K.3 FOR APARTMENT USE
    - SECTION 275-19.2-E BUILDING SIZE
    - TABLE 19-B BUILDNG HEIGHT

19. A CONDITIONAL USE PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN WETLAND BUFFERS.

20. THE EXISTING HISTORICAL MARKER SHALL BE RESTORED AT THE EXPENSE OF THE APPLICANT PRIOR TO THE CERTIFICATE OF OCCUPANCY.

21. A BLASTING PERMIT SHALL BE SUBMITTED AND APPROVED BY THE ROCHESTER FIRE DEPARTMENT PRIOR TO ANY BLASTING WORK.

22. ROCHESTER DPW STAFF SHALL BE ALLOWED PERIODIC ACCESS TO THE PARKING AREAS FOR INSPECTIONS RELATED TO THE ANNUAL STORMWATER INFRASTRUCTURE REPORT.

23. SNOW SHALL BE REMOVED USING GREEN SNO-PRO TECHNIQUES.

24. ADDITIONAL CITY PERMITS REQUIRED:
    - CITY DPW STORMWATER PERMIT
    - CITY WATER AND SEWER CONNECTION PERMIT
    - CITY ROW EXCAVATION AND DRIVEWAY PERMIT

25. STATE PERMITS REQUIRED:
    - NHDES WETLAND PERMIT #2022-00563 DATED APRIL 26, 2022
    - NHDES ALTERATION OF TERRAIN PERMIT #AoT-2182 DATED JUNE 28, 2022
    - NHDES SEWER CONNECTION PERMIT #D2022-0614 DATED JULY 19, 2022
    - NHDOT DRIVEWAY PERMIT #06-389-654 DATED APRIL 7, 2022

PROJECT PARCEL
CITY OF -ROCHESTER
TAX MAP 137, LOT 35-1

APPLICANT
GROEN CONSTRUCTION
120 WASHINGTON STREET
SUITE 302
ROCHESTER NH 03839

TOTAL LOT AREA
8.4 ACRES±

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

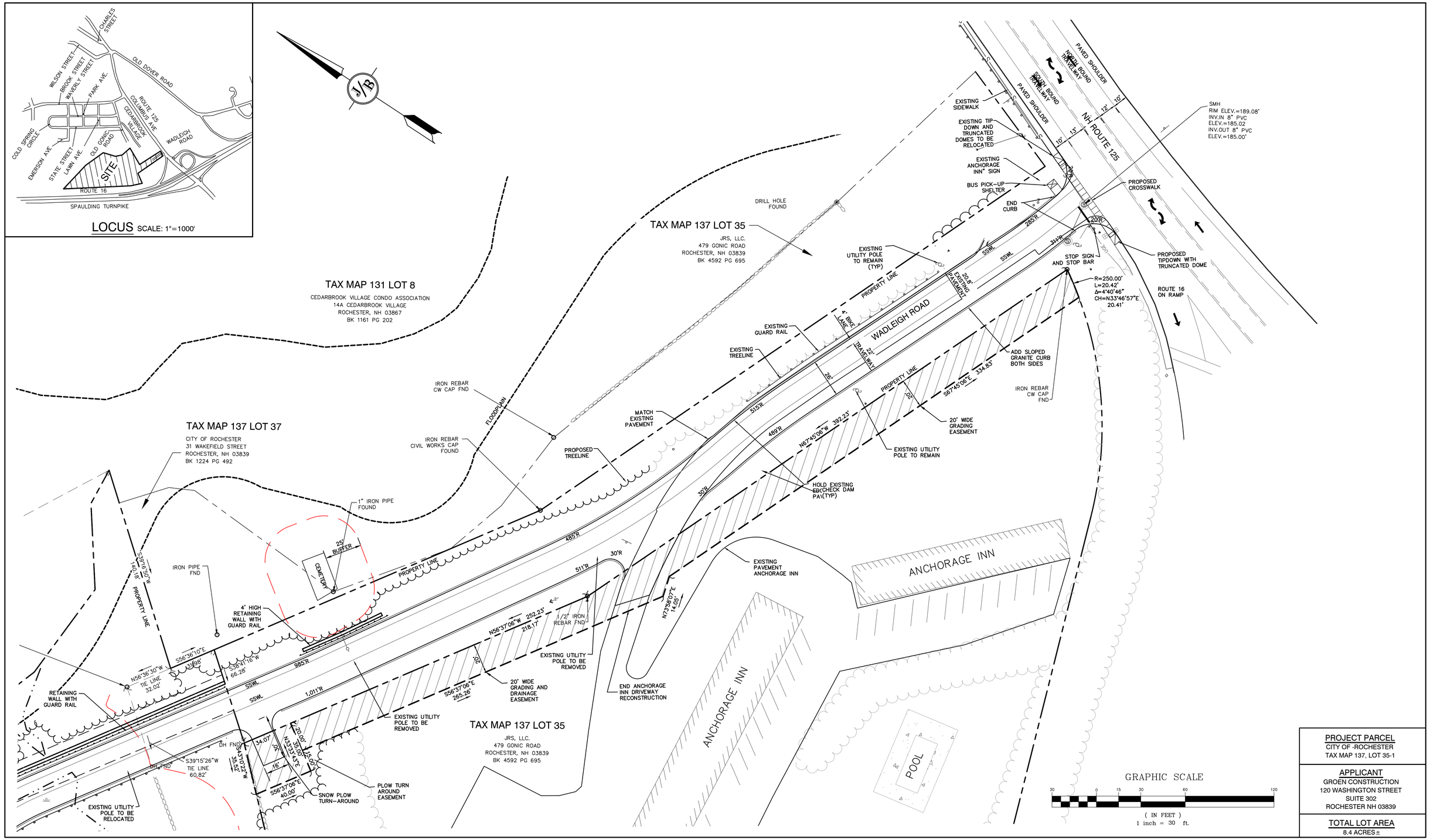
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	SITE PLAN
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
C3
SHEET 6 OF 29
JBE PROJECT NO. 21137



PROJECT PARCEL
CITY OF -ROCHESTER
TAX MAP 137, LOT 35-1

APPLICANT
GROEN CONSTRUCTION
120 WASHINGTON STREET
SUITE 302
ROCHESTER NH 03839

TOTAL LOT AREA
8.4 ACRES±

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

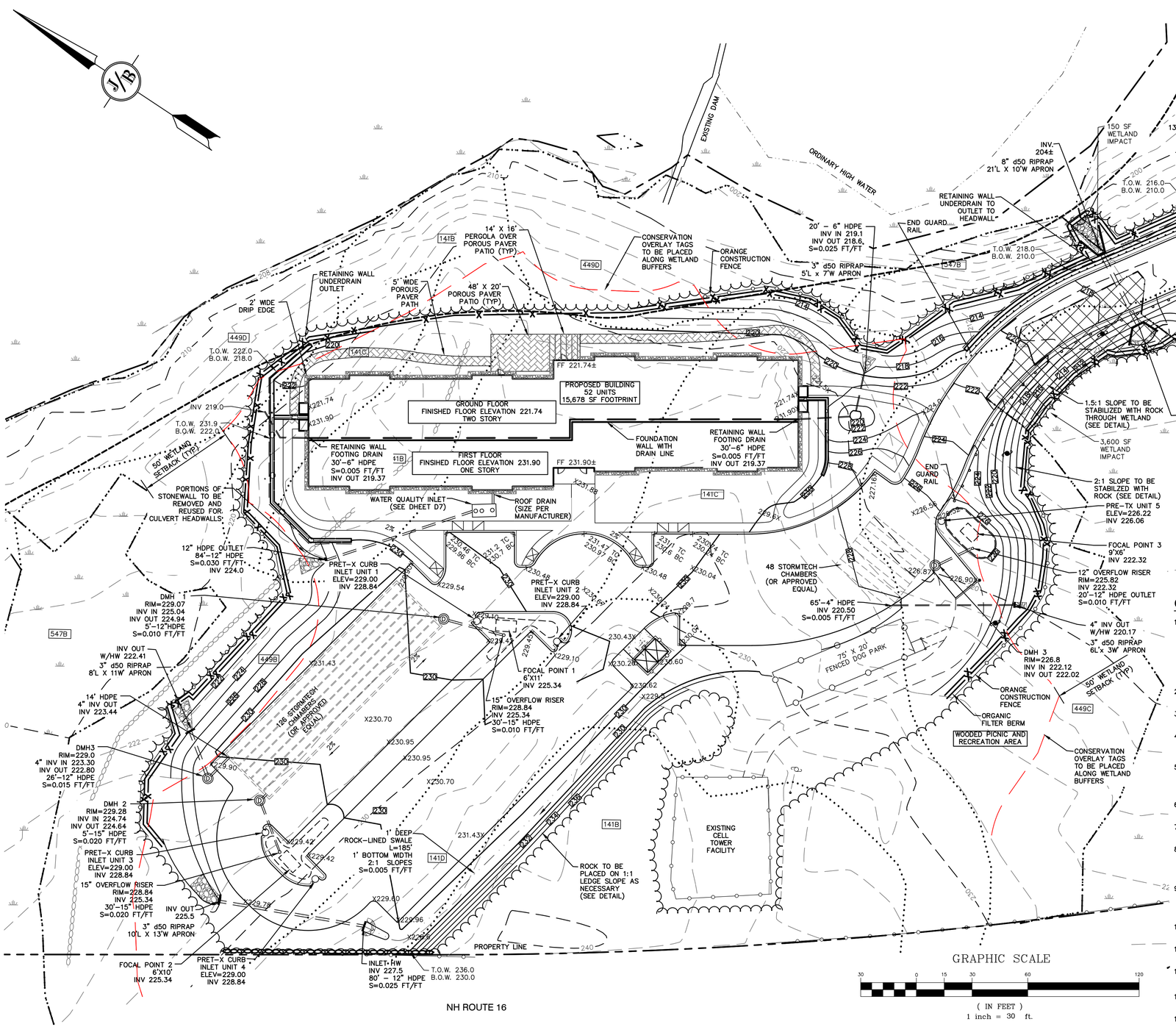
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	SITE PLAN
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
C4
SHEET 7 OF 29
JBE PROJECT NO. 21137



GRADING AND DRAINAGE NOTES:

1. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC., NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 888-DIG-SAFE (888-344-7233).
2. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
3. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED. SEE CONSTRUCTION SEQUENCE ON SHEET E1.
4. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO HAVE THE PROJECT'S LAND SURVEYOR STAKE OR FLAG CLEARING LIMITS. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED.
5. ALL ROOF DRAINS FROM BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AND WITNESS AT THE END. ALL EXTERIOR ROOF DOWNSPOUTS ARE TO BE INSTALLED WITH OVERFLOW DEVICES.
6. ALL SWALES AND DETENTION PONDS ARE TO BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
7. PROPOSED RIM ELEVATIONS OF DRAINAGE STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES.
8. ALL SWALES AND ANY SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN SC150BN EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER), UNLESS OTHERWISE SPECIFIED, OR RIPRAP. SEE EROSION CONTROL PLAN sHEET C6 IN THIS SET.
9. ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4' MIN) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS. CATCH BASINS SHALL HAVE 3' DEEP SUMPS WITH GREASE HOODS, UNLESS OTHERWISE NOTED.
10. ALL DRAINAGE STRUCTURES SHALL BE PRECAST, UNLESS OTHERWISE SPECIFIED.
11. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC H20 LOADING AND SHALL BE INSTALLED ACCORDINGLY.
12. IMMEDIATELY APPLY AND COMPACT STONE BASE FOR BUILDING PAD TO +/-½" PRIOR TO EXCAVATING INTERIOR AND PERIMETER FOOTINGS.
13. THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG WETLAND BUFFERS AS SHOWN ON PLAN.
14. ALL DRAINAGE PIPE SHALL BE NON-PERFORATED ADS N-12 OR APPROVED EQUAL.
15. STONE INLET PROTECTION SHALL BE PLACED AT ALL CATCH BASINS. SEE DETAIL WITHIN THE DETAIL SHEETS.
16. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY ALL GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE EPA SWPPP DURING CONSTRUCTION OPERATIONS.
17. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
18. ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 3 DAYS OF FINAL GRADING.
19. TEMPROARY STABILIZATION MEASURES SHALL BE IN PLACE WITHIN 5 CALENDAR DAYS FOR EXPOSED SOIL AREAS THAT ARE WITHIN 100-FEET OF A SURFACE WATER BODY OR WETLAND.
20. SHOULD CONSTRUCTION STOP FOR LONGER THAN 3 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED.
21. MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN EVENT OF 0.5" OR GREATER IN A 24 HOUR PERIOD AND AT LEAST ONCE A WEEK.
22. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE, AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
23. CONSTRUCTION VEHICLES SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE TO THE EXTENT POSSIBLE THROUGHOUT CONSTRUCTION.
24. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
25. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
26. SEDIMENT SHALL BE REMOVED FROM ALL SEDIMENT BASINS BEFORE THEY ARE 25% FULL.
27. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
28. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, IF DEEMED NECESSARY BY ON-SITE INSPECTION BY ENGINEER AND/OR REGULATORY OFFICIALS.
29. SEE ALSO EROSION AND SEDIMENT CONTROL SPECIFICATIONS ON SHEET E1 AND EROSION CONTROL SHEET C6.
30. DRAINAGE INFRASTRUCTURE SHALL BE CONSTRUCTED PRIOR TO CONSTRUCTION ON NEW BUILDING AND PARKING. CARE TO BE TAKEN TO NOT IMPACT THE SUBDURFACE DRAINAGE SYSTEM DURING CONSTRUCTION.

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

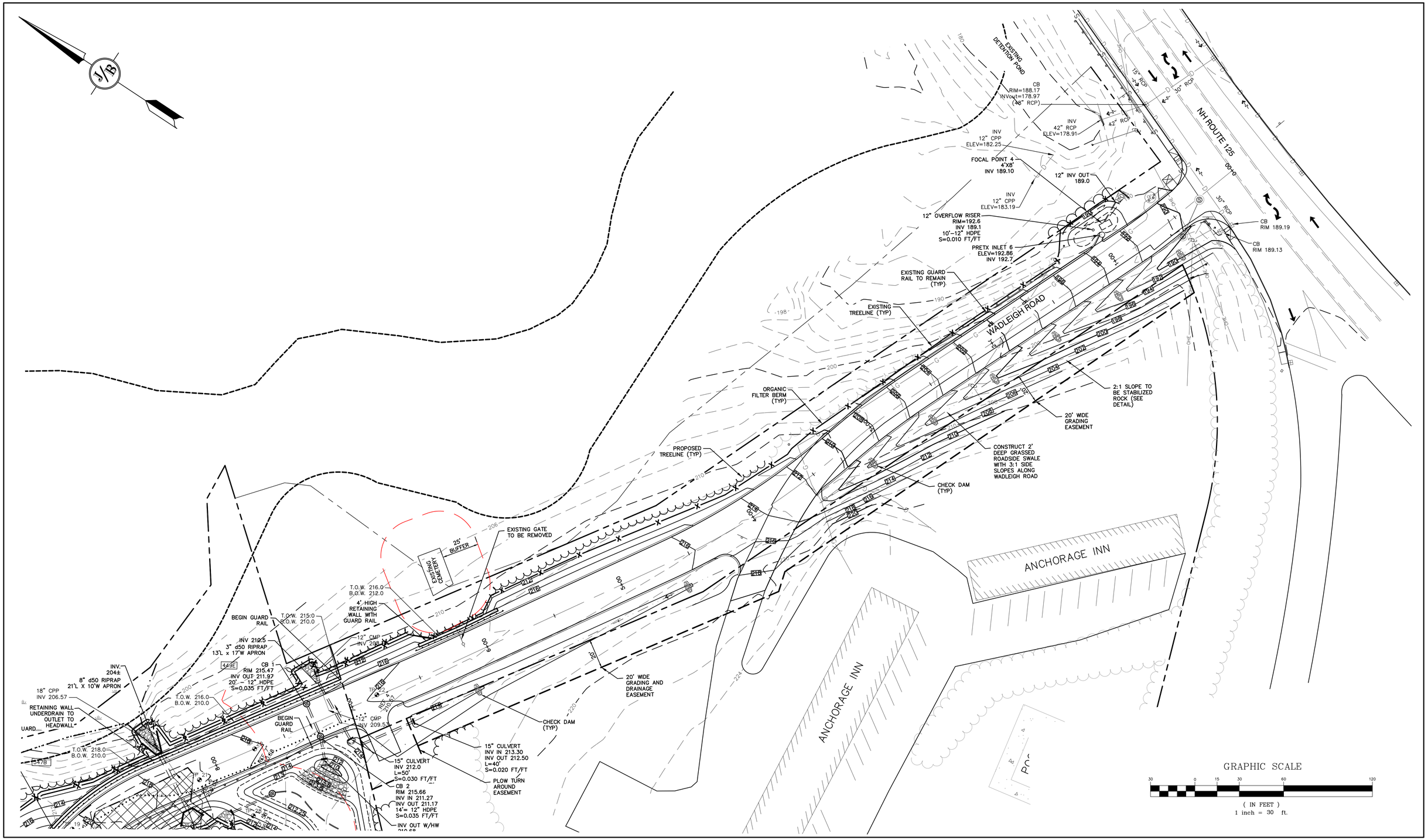
Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: GRADING AND DRAINAGE PLAN

Project: WADLEIGH ROAD APARTMENTS
ROCHESTER, NH

Owner of Record: SSG, LLC ATTN: FENTON GROEN
120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
C5



Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.:21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

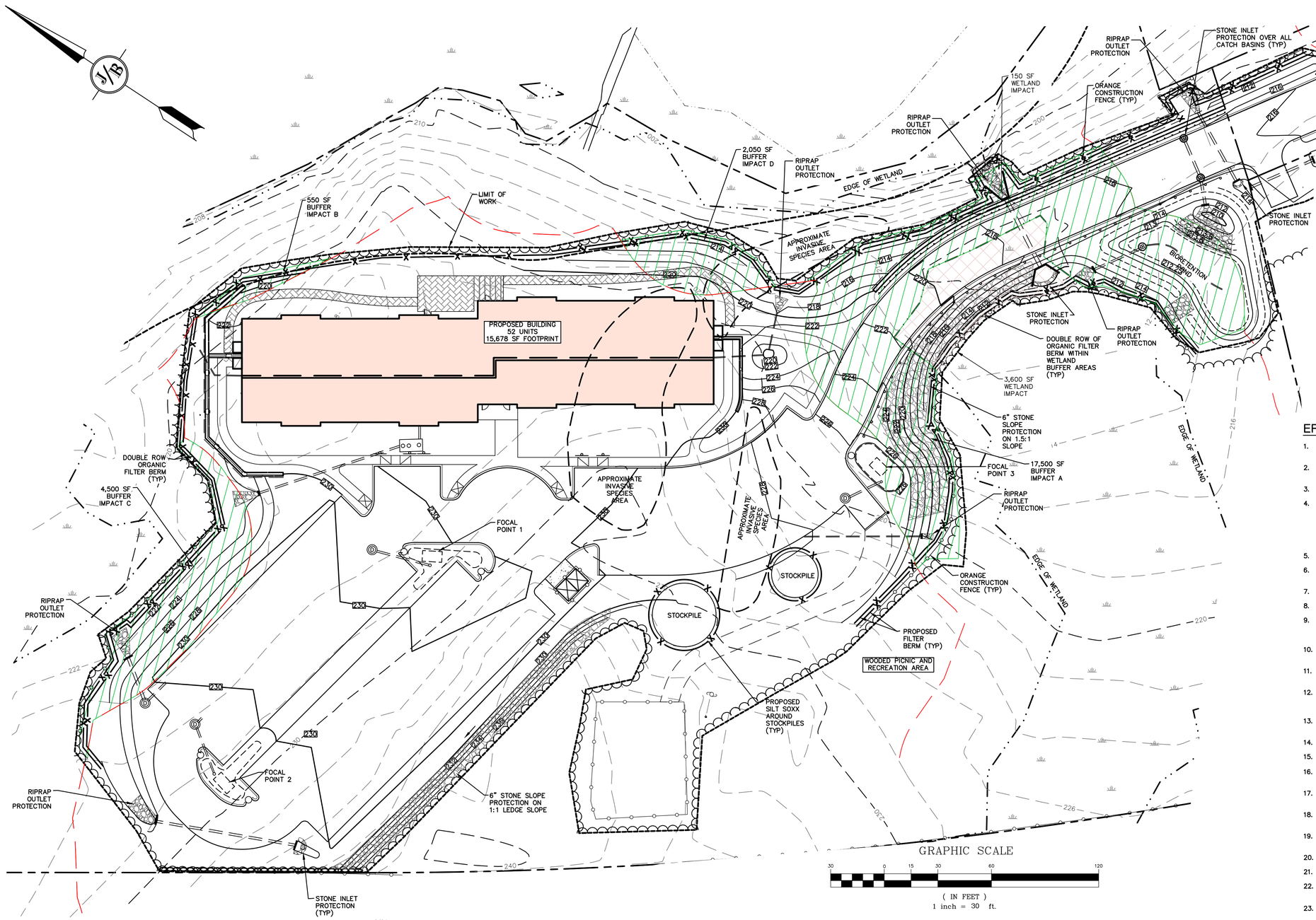
Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: GRADING AND DRAINAGE PLAN

Project: WADLEIGH ROAD APARTMENTS
ROCHESTER, NH

Owner of Record: SSG, LLC ATTN: FENTON GROEN
120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
C6



INVASIVE SPECIES NOTES:

1. PRIOR TO ANY DISTURBANCE IN AREAS OF JAPANESE KNOTWEED, THE LIMITS OF THE INVASIVE VEGETATION SHALL BE DELINEATED BY A QUALIFIED PROFESSIONAL.
2. PRIOR TO EXCAVATION IN INFESTED AREAS, ABOVE GROUND PLANT MATERIAL SHALL BE CAREFULLY CUT TO AVOID DISPERSING PLANT MATERIAL, BAGGED IN BLACK PLASTIC BAGS AND LANDFILLED, OR PROPERLY DISPOSED OF USING ANOTHER APPROVED METHOD.
3. EXCAVATION IN AREAS OF JAPANESE KNOTWEED SHALL EXTEND SIX (6) FEET BEYOND THE LATERAL LIMIT OF THE PLANT SURFACE GROWTH TO A DEPTH OF FIVE (5) FEET BUT NOT BELOW PROOSED SUBGRADE OR SLOPE LIMITS.
4. SOIL EXCAVATED FROM AREAS INFESTED WITH JAPANESE KNOTWEED MUST BE BURIED AT LEAST THREE (5) FEET BELOW GRADE OR PROPERTY DISPOSED OF USING ANOTHER APPROVED METHOD.
5. SOIL FROM THESE AREAS MUST NOT BE USED IN OTHER AREAS OF THE SITE.
6. EQUIPMENT THAT OPERATES WITHIN AREAS OF INVASIVE VEGETATION MUST BE CLEANED OF ALL PLANT MATERIAL AND SOIL AT THE SITE OF INFESTATION BEFORE MOVING TO ANOTHER WORK AREA.
7. STAGING AREAS AND STOCKPILES SHOULD NOT BE LOCATED IN AREAS OF INVASIVE VEGETATION.
8. STOCKPILES OF SOIL CONTAMINATED WITH INVASIVE SPECIES MUST BE ON AN IMPERVIOUS SURFACE AND COVERED.
9. SOIL CONTAINING INVASIVE PLANT MATERIAL MUST BE COVERED IF TRANSPORTED.
10. MONITOR INVASIVE SPECIES AREAS FOLLOWING GRADING FOR REGROWTH AND TREAT

EROSION CONTROL NOTES:

1. A NHDES WETLAND PERMIT IS REQUIRED FOR ALL WORK WITHIN THE JUSRISDICTIONAL WETLAND. TOTAL WETLAND IMPACT SHOWN = 4,000 SF
2. A CONDTIONAL USE PERMIT IS REQUIRED FOR ALL WORK WITHIN THE WETLAND BUFFER AREA. TOTAL BUFFER IMPACT AREA SHOWN = 24,000 SF
3. ALL STOCKPILES TO BE SURROUNDED BY SILT SOXX.
4. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC., NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 888-DIG-SAFE (888-344-7233).
5. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
6. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED. SEE CONSTRUCTION SEQUENCE ON SHEET E1.
7. ORANGE CONSTRUCTION FENCE IS TO BE INSTALLED ALONG WETLAND BUFFERS AS SHOWN ON THE PLAN.
8. ALL SWALES AND DETENTION PONDS ARE TO BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
9. ALL SWALES AND ANY SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN SC150BN EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER), UNLESS OTHERWSE SPECIFIED.
10. IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG PROPERTY LINES IN ALL AREAS.
11. STONE INLET PROTECTION SHALL BE PLACED AT ALL CATCH BASINS AND CULVERT INLETS. SEE DETAILS WITHIN THE DETAIL SHEETS.
12. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY ALL GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE EPA SWPPP DURING CONSTRUCTION OPERATIONS.
13. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
14. ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 3 DAYS OF FINAL GRADING.
15. SHOULD CONSTRUCTION STOP FOR LONGER THAN 3 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED.
16. MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN EVENT OF 0.5" OR GREATER IN A 24 HOUR PERIOD AND AT LEAST ONCE A WEEK.
17. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE, AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
18. CONSTRUCTION VEHICLES SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE TO THE EXTENT POSSIBLE THROUGHOUT CONSTRUCTION.
19. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
20. SEDIMENT SHALL BE REMOVED FROM ALL SEDIMENT BASINS BEFORE THEY ARE 25% FULL.
21. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
22. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, IF DEEMED NECESSARY BY ON-SITE INSPECTION BY ENGINEER AND/OR REGULATORY OFFICIALS.
23. SEE ALSO EROSION AND SEDIMENT CONTROL SPECIFICATIONS ON SHEET E1.
24. MARKERS SHALL BE PLACED ALONG WETLAND BOUNDARIES.

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

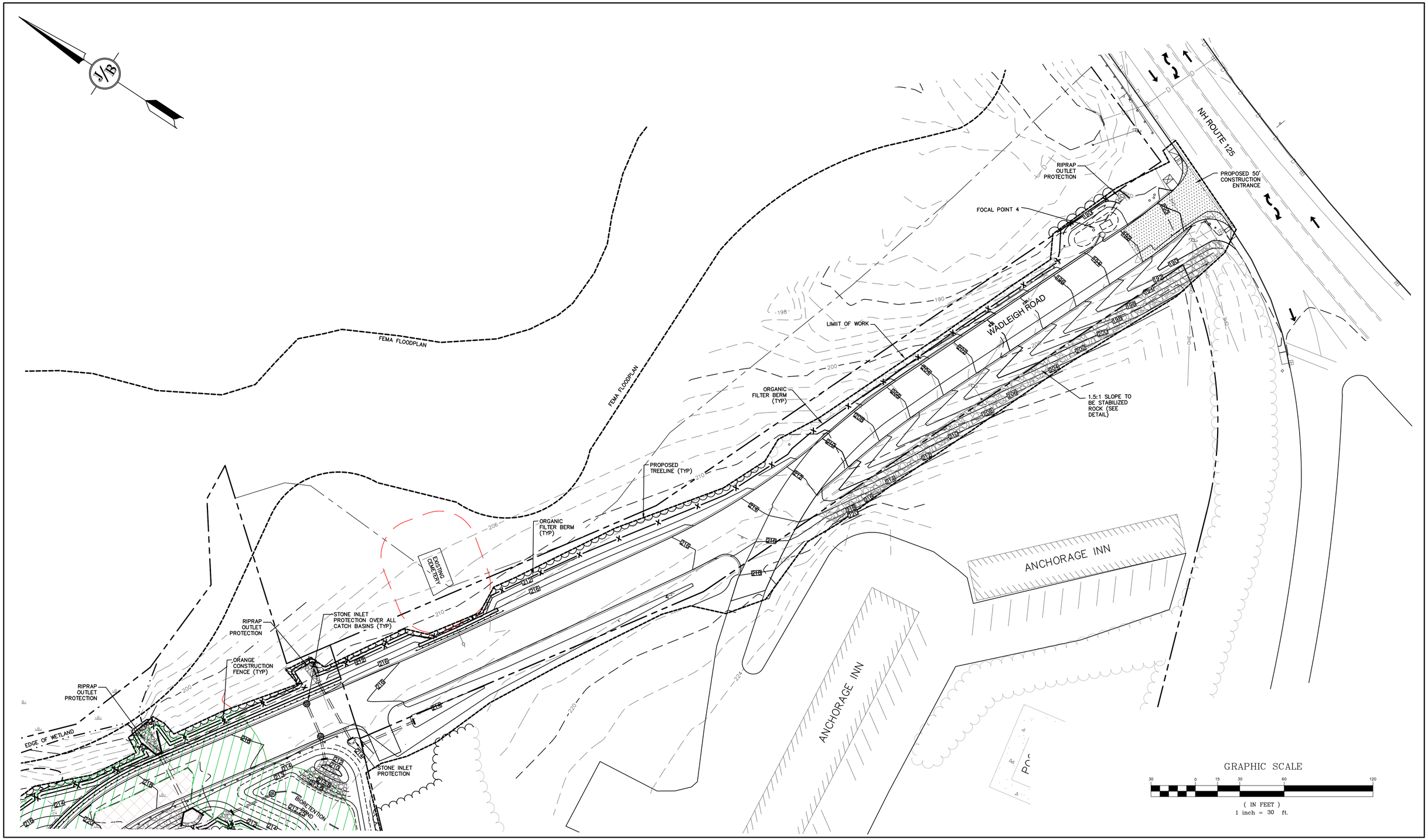
Designed and Produced in NH
J/B Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: EROSION CONTROL PLAN

Project: WADLEIGH ROAD APARTMENTS
ROCHESTER, NH

Owner of Record: SSG, LLC ATTN: FENTON GROEN
120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
C7



Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

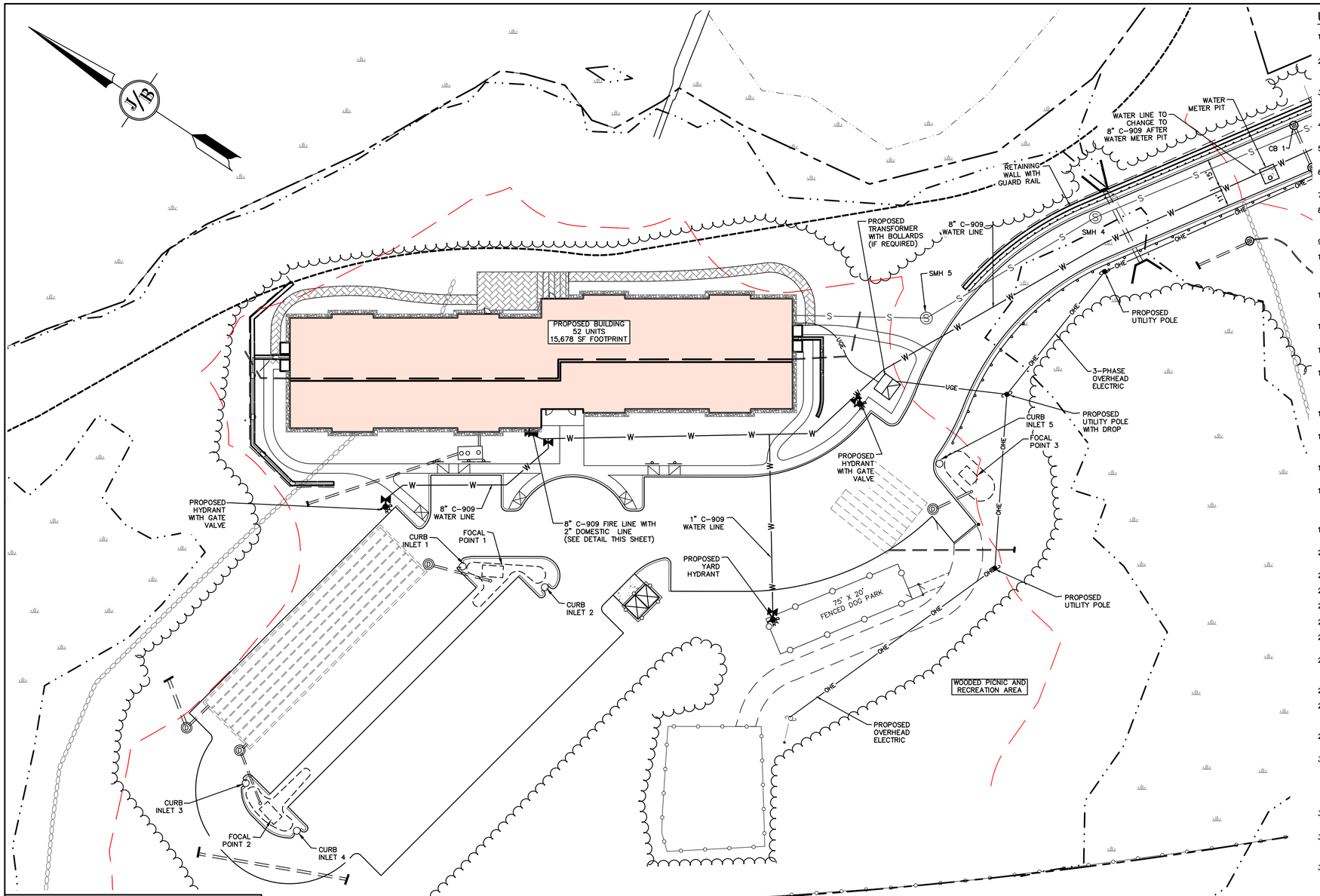
Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

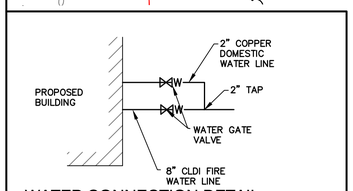
Plan Name: EROSION CONTROL PLAN

Project: WADLEIGH ROAD APARTMENTS
ROCHESTER, NH

Owner of Record: SSG, LLC ATTN: FENTON GROEN
120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
C8
SHEET 11 OF 29
JBE PROJECT NO. 21137





WATER CONNECTION DETAIL

NOT TO SCALE

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

UTILITY NOTES:

1. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, CONNECTION FEES AND BONDS.
2. THE CONTRACTOR SHALL PROVIDE A MINIMUM NOTICE OF FOURTEEN (14) DAYS TO ALL CORPORATIONS, COMPANIES AND/OR LOCAL AUTHORITIES OWNING OR HAVING A JURISDICTION OVER UTILITIES RUNNING TO, THROUGH OR ACROSS PROJECT AREAS PRIOR TO DEMOLITION AND/OR CONSTRUCTION ACTIVITIES.
3. THE LOCATION, SIZE, DEPTH AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE TO THE STANDARDS AND REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY (ELECTRIC, TELEPHONE, CABLE TELEVISION, FIRE ALARM, GAS, WATER, AND SEWER).
4. A PRECONSTRUCTION MEETING SHALL BE HELD WITH THE OWNER, ENGINEER, ARCHITECT, CONTRACTOR, LOCAL OFFICIALS, AND ALL PROJECT-RELATED UTILITY COMPANIES (PUBLIC AND PRIVATE) PRIOR TO START OF CONSTRUCTION.
5. ALL CONSTRUCTION SHALL CONFORM TO THE CITY STANDARDS AND REGULATIONS, AND NHDES STANDARDS AND SPECIFICATIONS, WHICHEVER ARE MORE STRINGENT, UNLESS OTHERWISE SPECIFIED.
6. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
7. BUILDING TO BE SERVICED BY UNDERGROUND UTILITIES UNLESS OTHERWISE NOTED.
8. THE CONTRACTOR IS TO VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITY STUBS PRIOR TO CONSTRUCTION AND DISCONNECT ALL EXISTING SERVICE CONNECTIONS AT THEIR RESPECTIVE MAINS IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANY'S STANDARDS AND SPECIFICATIONS. ENGINEER TO BE NOTIFIED.
9. AS-BUILT PLANS SHALL BE SUBMITTED TO DEPARTMENT OF PUBLIC WORKS.
10. INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW AT CHANGES IN DIRECTION. THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE THROUGH CHANNEL UNDERLAYMENT OF INVERT, AND SHELF SHALL CONSIST OF BRICK MASONRY.
11. FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30 INCH DIA, CLEAR OPENING. THE WORD "SEWER" OR DRAIN" SHALL BE CAST INTO THE CENTER OF THE UPPER FACE OF EACH COVER WITH RAISED, 3" LETTERS.
12. SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H20 LOADS.
13. CONTRACTOR SHALL PLACE 2" WIDE METAL WIRE IMPREGNATED RED PLASTIC WARNING TAPE OVER ENTIRE LENGTH OF ALL GRAVITY SEWERS, SERVICES, FORCE MAINS, AND C-909 PVC WATER LINES.
14. SANITARY SEWER FLOW CALCULATIONS:
    38 – TWO BEDROOM UNITS @ 150 GPD/BEDROOM = 11,400 GPD
    14 – ONE BEDROOM UNITS @ 150/GPD/BEDROOM = 2,100 GPD
    TOTAL FLOW = 13,500 GPD
15. ALL SANITARY STRUCTURE INTERIOR DIAMETERS (4' MIN) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS.
16. PROPOSED RIM ELEVATIONS OF DRAINAGE AND SANITARY MANHOLES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISH GRADE AS SHOWN ON THE GRADING AND DRAINAGE PLAN.
17. ALL WATER MAINS AND SERVICE PIPES SHALL HAVE A MINIMUM 12" VERTICAL AND 24" HORIZONTAL SEPARATION TO MANHOLES, OR CONTRACTOR SHALL INSTALL BOARD INSULATION FOR FREEZING PROTECTION.
18. WATER MAINS SHALL BE HYDROSTATICALLY PRESSURE TESTED FOR LEAKAGE PRIOR TO ACCEPTANCE. WATERMAINS SHALL BE TESTED AT 1.5 TIMES THE WORKING PRESSURE OR 150 PSI, WHICH EVER IS GREATER. TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 4 OF AWWA STANDARD C 600. WATERMAINS SHALL BE DISINFECTED AFTER THE ACCEPTANCE OF THE PRESSURE AND LEAKAGE TESTS ACCORDING TO AWWA STANDARD C 651.
19. ALL WATER AND SANITARY LEADS TO BUILDING(S) SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLANS AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AND WITNESS AT END.
20. IF THE BUILDING IS REQUIRED TO HAVE A SPRINKLER SYSTEM, A PRECONSTRUCTION MEETING SHALL BE HELD BETWEEN THE CONTRACTOR, OWNER, ARCHITECT AND THE LOCAL FIRE DEPARTMENT PRIOR TO THE INSTALLATION.
21. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, MECHANICAL JOINTS AND FIRE HYDRANTS.
22. DIMENSIONS ARE SHOWN TO CENTERLINE OF PIPE OR FITTING.
23. REFER TO FIRE PROTECTION SHEETS FOR LOCATION AND DETAIL OF FIRE LINE LEAD IN TO BUILDING.
24. FIRE LINE SHALL BE STUBBED UP 1' ABOVE FINISH FLOOR ELEVATION IN SPRINKLER ROOM.
25. THE CONTRACTOR SHALL HAVE THE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER FIRE PROTECTION SYSTEM PRIOR TO INSTALLATION.
26. CONTRACTOR TO FURNISH SHOP DRAWINGS FOR UTILITY RELATED ITEMS TO ENSURE CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. SHOP DRAWINGS SHOULD BE SENT IN TRIPLICATE TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
27. EXISTING UTILITIES SHALL BE DIGSAFED BEFORE CONSTRUCTION.
28. ALL WATER LINES SHOULD HAVE TESTABLE BACKFLOW PREVENTERS AT THE ENTRANCE TO BUILDING. TESTABLE BACKFLOW PREVENTION DEVICES MUST BE REGISTERED WITH THE CITY UTILITY BILLING OFFICE. TEST RESULTS SHALL BE SUBMITTED TO UTILITY BILLING PRIOR TO DPW SIGN-OFF ON CERTIFATE OF OCCUPANCEY.
29. ALL GRAVITY SEWER PIPE, MANHOLES, AND FORCE MAINS SHALL BE TESTED ACCORDING TO NHDES STANDARDS OF DESIGN AND CONSTRUCTION FOR SEWAGE AND WASTEWATER TREATMENT FACILITIES, CHAPTER ENV-WQ 700. ADOPTED ON 10-15-14.
30. <u>ENV-WQ 704.08 GRAVITY SEWER PIPE TESTING:</u> GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY USE OF LOW-PRESSURE AIR TESTS CONFORMING WITH ASTM F1417-92(2005) OR UNI-BELL PVC PIPE ASSOCIATION UNI-B-6. LINES SHALL BE CLEANED AND VISUALLY INSPECTED AND TRUE TO LINE AND GRADE. DEFLECTION TESTS SHALL TAKE PLACE AFTER 30 DAYS FOLLOWING INSTALLATION AND THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5% OF AVERAGE INSIDE DIAMETER. A RIGID BALL OR MANDREL WITH A DIAMETER OF AT LEAST 95% OF THE AVERAGE INSIDE PIPE DIAMETER SHALL BE USED FOR TESTING PIPE DEFLECTION. THE DEFLECTION TEST SHALL BE CONDUCTED WITHOUT MECHANICAL PULLING DEVICES.
31. <u>ENV-WQ 704.17 SEWER MANHOLE TESTING:</u> SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST PRIOR TO BACKFILLING AND PLACEMENT OF SHELVES AND INVERTS.
32. SANITARY SEWER LINES SHALL BE LOCATED AT LEAST TEN (10) FEET HORIZONTALLY FROM AN EXISTING OR PROPOSED WATER LINE. WHEN A SEWER LINE CROSSES UNDER A WATER LINE, THE SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM THE WATERMAIN. THE SEWER LINE SHALL ALSO MAINTAIN A VERTICAL SEPARATION OF NOT LESS THAN 18 INCHES.
33. SEWERS SHALL BE BURIED TO A MINIMUM DEPTH OF 6 FEET BELOW GRADE IN ALL ROADWAY LOCATIONS, AND TO A MINIMUM DEPTH OF 4 FEET BELOW GRADE IN ALL CROSS-COUNTRY LOCATIONS. PROVIDE TWO-INCHES OF R-10 FOAM BOARD INSULATION 2-FOOT WIDE TO BE INSTALLED 6-INCHES OVER SEWER PIPE IN AREAS WHERE DEPTH IS NOT ACHIEVED. A WAIVER FROM THE DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER ENGINEERING BUREAU IS REQUIRED PRIOR TO INSTALLING SEWER AT LESS THAN MINIMUM COVER.
34. THE CONTRACTOR SHALL MINIMIZE THE DISRUPTIONS TO THE EXISTING SEWER FLOWS AND THOSE INTERRUPTIONS SHALL BE LIMITED TO FOUR (4) HOURS OR LESS AS DESIGNATED BY THE TOWN SEWER DEPARTMENT.
35. LIGHTING CONDUIT SHALL BE SCHEDULE 40 PVC, AND SHALL BE INSTALLED IN CONFORMANCE WITH THE NATIONAL ELECTRIC CODE. CONTRACTOR SHALL PROVIDE EXCAVATION AND BACKFILL.
36. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
37. DISINFECTION OF WATER MAINS SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH AWWA STANDARD C651, LATEST EDITION. THE BASIC PROCEDURE TO BE FOLLOWED FOR DISINFECTING WATER MAINS IS AS FOLLOWS:
    a. PREVENT CONTAMINATING MATERIALS FROM ENTERING THE WATER MAIN DURING STORAGE, CONSTRUCTION, OR REPAIR.
    b. REMOVE, BY FLUSHING OR OTHER MEANS, THOSE MATERIALS THAT MAY HAVE ENTERED THE WATER MAINS.
    c. CHLORINATE ANY RESIDUAL CONTAMINATION THAT MAY REMAIN, AND FLUSH THE CHLORINATED WATER FROM THE MAIN.
    d. PROTECT THE EXISTING DISTRIBUTION SYSTEM FROM BACKFLOW DUE TO HYDROSTATIC PRESSURE TEST AND DISINFECTION PROCEDURES.
    e. DETERMINE THE BACTERIOLOGICAL QUALITY BY LABORATORY TEST AFTER DISINFECTION.
    f. MAKE FINAL CONNECTION OF THE APPROVED NEW WATER MAIN TO THE ACTIVE DISTRIBUTION SYSTEM
38. ALL CLDI WATER MAIN SHALL BE POLYWRAPPED. HYDRANTS SHALL BE NON-DRAINING, NON-ROTATING STEM EQUAL TO KENNEDY K-81-D. VALVES SHALL OPEN CLOCKWISE.

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

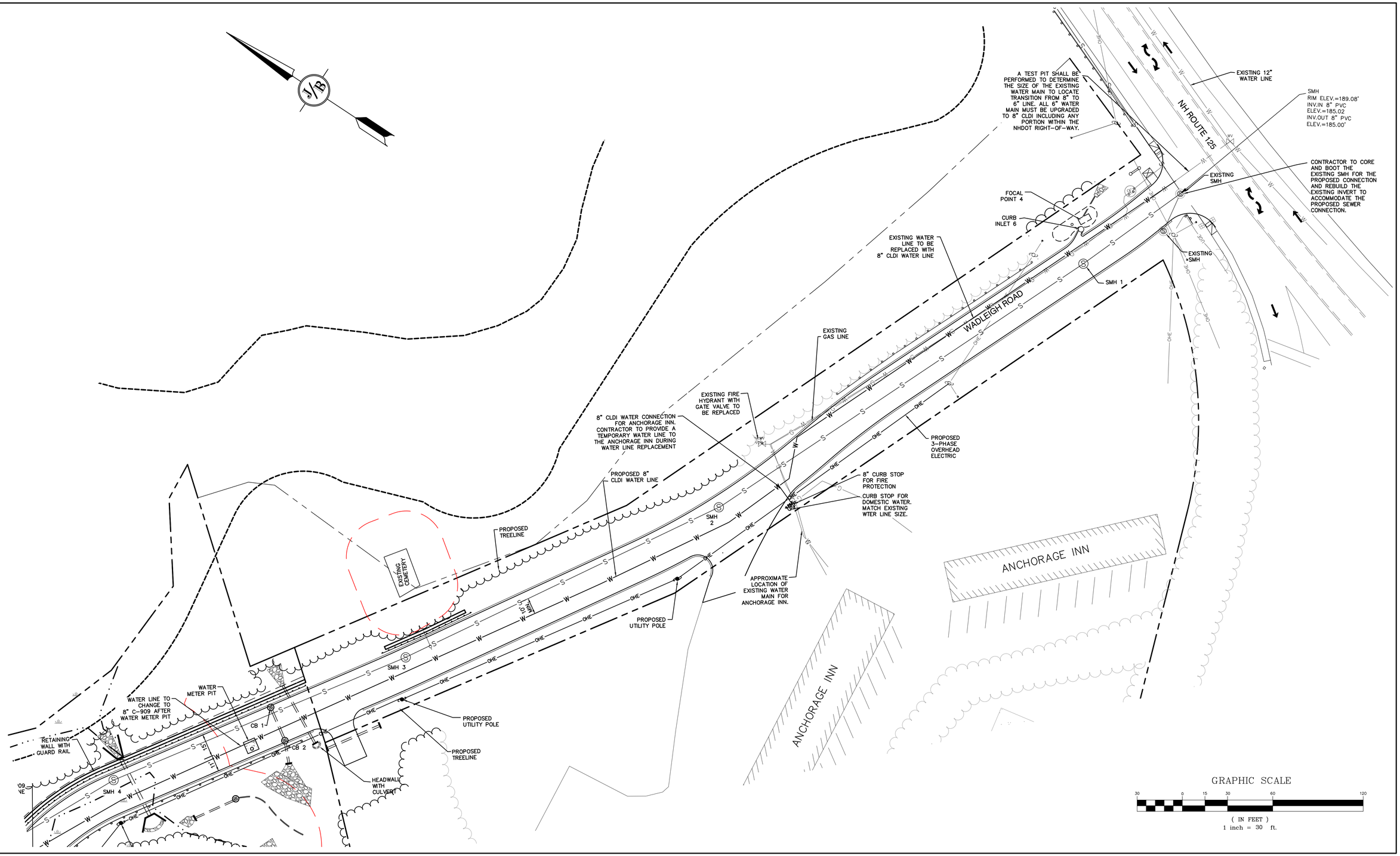
Designed and Produced in NH
J/B Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: UTILITY PLAN

Project: WADLEIGH ROAD APARTMENTS
ROCHESTER, NH

Owner of Record: SSG, LLC ATTN: FENTON GROEN
120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
U1



Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

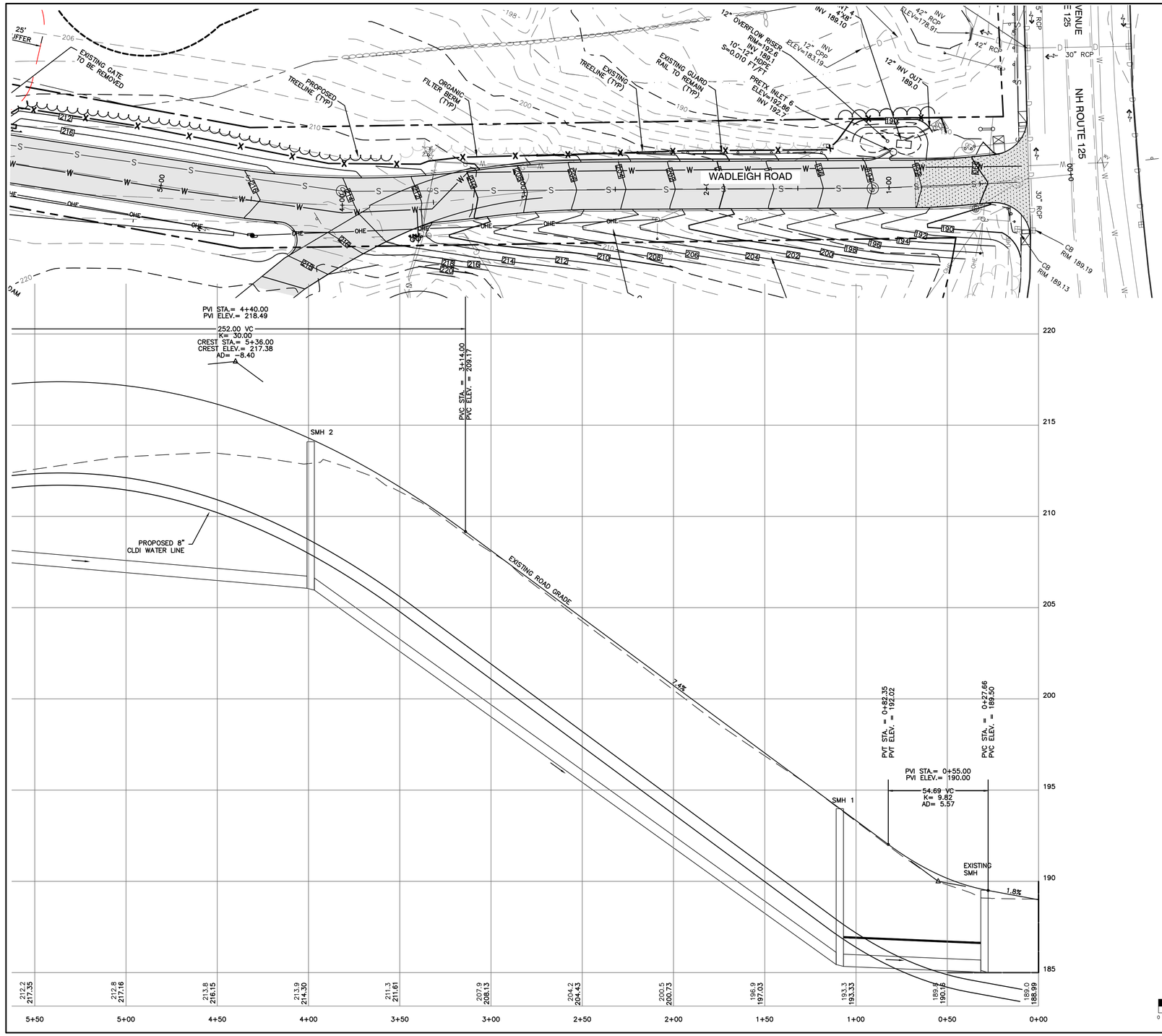
Designed and Produced in NH
J/B Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	UTILITY PLAN
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.

U2

SHEET 13 OF 29
JBE PROJECT NO. 21137



NOTES:

1. THIS SITE WILL REQUIRE A USEPA NPDES PERMIT FOR STORMWATER DISCHARGE FOR THE CONSTRUCTION SITE. THE CONSTRUCTION SITE OPERATOR SHALL DEVELOP AND IMPLEMENT A CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WHICH SHALL REMAIN ON SITE AND BE MADE ACCESSIBLE TO THE PUBLIC. THE CONSTRUCTION SITE OPERATOR SHALL SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA REGIONAL OFFICE SEVEN DAYS PRIOR TO COMMENCEMENT OF ANY WORK ON SITE. EPA WILL POST THE NOI AT HTTP: //CFPUB1.EPA.GOV/NPDES/STORMWATER/NOI/NOISEARCH.CFM. AUTHORIZATION IS GRANTED UNDER THE PERMIT ONCE THE NOI IS SHOWN IN "ACTIVE" STATUS ON THIS WEBSITE. A COMPLETED NOTICE OF TERMINATION SHALL BE SUBMITTED TO THE NPDES PERMITTING AUTHORITY WITHIN 30 DAYS AFTER EITHER OF THE FOLLOWING CONDITIONS HAVE BEEN MET:
   A. FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE; OR
   A. ANOTHER OPERATOR/PERMITTEE HAS ASSUMED CONTROL OVER ALL AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED. PROVIDE DPW WITH A COPY OF THE NOTICE OF TERMINATION (NOT).
2. ALL ROAD AND DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR THE CITY, AND NHDOT SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
3. DEVELOPER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
4. CONTRACTOR TO COORDINATE AND COMPLETE ALL WORK REQUIRED FOR THE RELOCATION AND/OR INSTALLATION OF ELECTRIC, CATV, TELEPHONE, AND FIRE ALARM PER UTILITY DESIGN AND STANDARDS. LOCATIONS SHOWN ARE APPROXIMATE. LOW PROFILE STRUCTURES SHALL BE USED TO THE GREATEST EXTENT POSSIBLE.
5. THIS PLAN HAS BEEN PREPARED BY JONES & BEACH ENGINEERS, INC. FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA SHOWN ON THE DESIGN PLANS. THIS INCLUDES ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS OF THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.
6. SILTATION AND EROSION CONTROLS SHALL BE INSTALLED PRIOR TO CONSTRUCTION, SHALL BE MAINTAINED DURING CONSTRUCTION, AND SHALL REMAIN UNTIL SITE HAS BEEN STABILIZED WITH PERMANENT VEGETATION. SEE DETAIL SHEET E1 FOR ADDITIONAL NOTES ON EROSION CONTROL.
7. ALL DISTURBED AREAS NOT STABILIZED BY NOVEMBER 1st SHALL BE COVERED WITH AN EROSION CONTROL BLANKET. PRODUCT TO BE SPECIFIED BY THE ENGINEER.
8. FINAL DRAINAGE, GRADING AND EROSION PROTECTION MEASURES SHALL CONFORM TO REGULATIONS OF THE PUBLIC WORKS DEPARTMENT.
9. CONTRACTOR TO VERIFY EXISTING UTILITIES AND TO NOTIFY ENGINEER OF ANY DISCREPANCY IMMEDIATELY.
10. ROADWAY INTERSECTIONS WITH SLOPE GRANITE CURB SHALL EXTEND AROUND RADIUS WITH 6' STRAIGHT PIECE ALONG TANGENT.
11. RETAINING WALLS SHALL BE DESIGNED AND STAMPED BY A LICENSED PROFESSIONAL ENGINEER. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER PRIOR TO INSTALLATION.
12. 6" PERFORATED ADS UNDER DRAIN PLACEMENT TO BE DETERMINED BY THE ENGINEER DURING TIME OF SUBGRADE INSPECTION. CONTRACTOR TO ADJUST LOCATION IN THE FIELD ONLY WITH PRIOR APPROVAL OF PROJECT ENGINEER OR PUBLIC WORKS DEPARTMENT. CONTRACTOR TO INCLUDE 3000 LF IN BID PRICE.
13. ENGINEER TO INSTALL PERMANENT BENCHMARK (REINFORCED GRANITE MARKER) AT LOCATIONS SHOWN ON PLANS. BENCH MARKS TO BE TIED TO STATE PLANE COORDINATE SYSTEM.
14. DRAINAGE INSPECTION AND MAINTENANCE SCHEDULE: SILT FENCING WILL BE INSPECTED DURING AND AFTER STORM EVENTS TO ENSURE THAT THE FENCE STILL HAS INTEGRITY AND IS NOT ALLOWING SEDIMENT TO PASS. SEDIMENT BUILD UP IN SWALES WILL BE REMOVED IF IT IS DEEPER THAN SIX INCHES, AND IS TO BE REMOVED FROM SUMPS BELOW THE INLET OF CULVERTS SEMIANNUALLY, AS WELL AS FROM CATCH BASINS. FOLLOWING MAJOR STORM EVENTS, THE STAGE DISCHARGE OUTLET STRUCTURES ARE TO BE INSPECTED AND ANY DEBRIS REMOVED FROM THE ORIFICE, TRASH TRACK AND EMERGENCY SPILL WAY. INFREQUENTLY, SEDIMENT MAY ALSO HAVE TO BE REMOVED FROM THE SUMP OF THE STRUCTURE.
15. ALL DRAINAGE INFRASTRUCTURE SHALL BE INSTALLED AND STABILIZED PRIOR TO DIRECTING ANY RUNOFF TO IT.
16. DETENTION PONDS REQUIRE TIMELY MAINTENANCE AND SHOULD BE INSPECTED AFTER EVERY MAJOR STORM EVENT, AS WELL AS FREQUENTLY DURING THE FIRST YEAR OF OPERATION, AND ANNUALLY THEREAFTER. EVERY FIVE YEARS, THE SERVICES OF A PROFESSIONAL ENGINEER SHOULD BE RETAINED TO PERFORM A THOROUGH INSPECTION OF THE DETENTION POND AND ITS INFRASTRUCTURE. ANY DEBRIS AND SEDIMENT ACCUMULATIONS SHOULD BE REMOVED FROM THE OUTLET STRUCTURE(S) AND EMERGENCY SPILLWAY(S) AND DISPOSED OF PROPERLY. DETENTION POND BERMS SHOULD BE MOWED AT LEAST ONCE ANNUALLY SO AS TO PREVENT THE ESTABLISHMENT OF WOODY VEGETATION. TREES SHOULD NEVER BE ALLOWED TO GROW ON A DETENTION POND BERM, AS THEY MAY DESTABILIZE THE STRUCTURE AND INCREASE THE POTENTIAL FOR FAILURE. AREAS SHOWING SIGNS OF EROSION OR THIN OR DYING VEGETATION SHOULD BE REPAIRED IMMEDIATELY BY WHATEVER MEANS NECESSARY, WITH THE EXCEPTION OF FERTILIZER. RODENT BORROWS SHOULD BE REPAIRED IMMEDIATELY AND THE ANIMALS SHOULD BE TRAPPED AND RELOCATED IF THE PROBLEM PERSISTS.
17. THE DETENTION PONDS ARE TO BE CONSTRUCTED PRIMARILY THROUGH EXCAVATION. IN THOSE AREAS WHERE THE BERMS MUST BE CONSTRUCTED BY THE PLACEMENT OF FILL, THE ENTIRE EMBANKMENT AREA OF THE DETENTION PONDS SHALL BE EXCAVATED TO PROPOSED GRADE, STRIPPED OF ALL ORGANIC MATERIALS, COMPACTED TO AT LEAST 95% AND SCARIFIED PRIOR TO THE PLACEMENT OF THE EMBANKMENT MATERIAL. IN THE EVENT THE FOUNDATION MATERIAL EXPOSED DOES NOT ALLOW THE SPECIFIED COMPACTION, AN ADDITIONAL ONE FOOT (1') OF EXCAVATION AND THE PLACEMENT OF A ONE FOOT (1') THICK, TWELVE FOOT (12') WIDE PAD OF THE MATERIAL DESCRIBED IN THE NOTE BELOW, COMPACTED TO 95% OF ASTM D-1557 MAY BE NECESSARY. PLACEMENT AND COMPACTION SHOULD OCCUR AT A MOISTURE CONTENT OF OPTIMUM PLUS OR MINUS 3%, AND NO FROZEN OR ORGANIC MATERIAL SHOULD BE PLACED WITHIN FOR ANY REASON.
18. EMBANKMENT MATERIAL FOR THE BERMS SHALL BE CLEAN MINERAL SOIL WITH A CLAY COMPONENT FREE OF ROOTS, ORGANIC MATTER, AND OTHER DELETERIOUS SUBSTANCES, AND SHALL CONTAIN NO ROCKS OR LUMPS OVER FOUR INCHES (4") IN DIAMETER. THIS MATERIAL SHOULD BE INSTALLED IN 6" LIFTS AND COMPACTED TO 95% OS ASTM D-1557, AND SHOULD MEET THE FOLLOWING SPECIFICATIONS: 4" PASSING 100%, #4 SIEVE 25-70%, #200 SIEVE 10-29% (IN TOTAL SAMPLE).
19. EMBANKMENT IS TO HAVE 3:1 SIDE SLOPES (MAX.) AND IS TO BE BROUGHT TO SPECIFIED GRADES PRIOR TO THE ADDITION OF LOAM (4" MINIMUM) SO AS TO ALLOW FOR THE COMPACTION OF THE STRUCTURE OVER TIME WHILE MAINTAINING THE PROPER BERM ELEVATION.
20. COMPACTION TESTING SERVICES (I.E. NUCLEAR DENSITY TESTS) ARE TO BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER RETAINED BY THE CONTRACTOR FOR ROADWAY CONSTRUCTION, AND ON THE FOUNDATION OF THE BERM AND ON EVERY LIFT OF NEWLY PLACED MATERIAL.

GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft Horiz.
1 inch = 3 ft Vert.

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

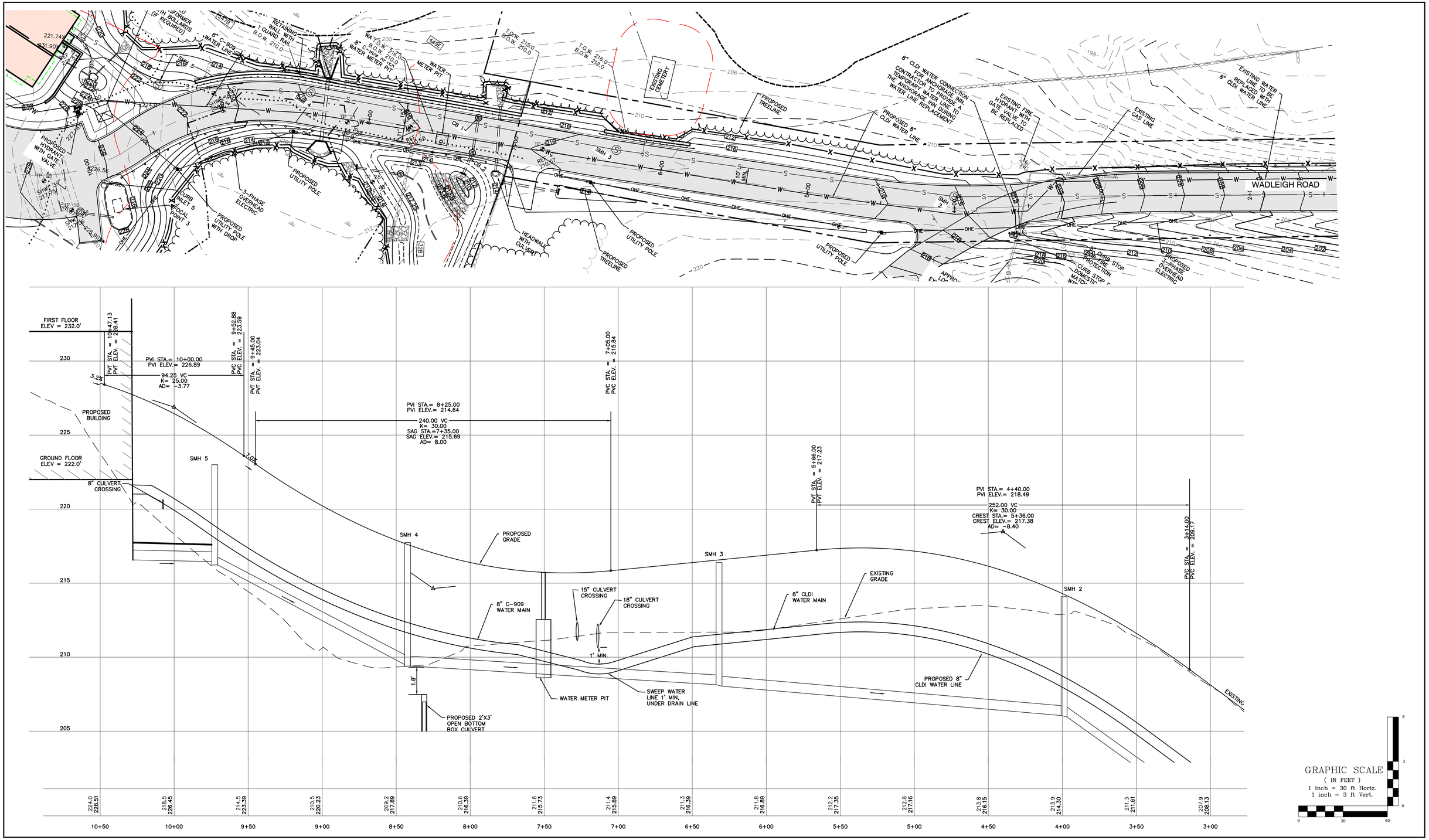
Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: PLAN AND PROFILE

Project: WADLEIGH ROAD APARTMENTS
ROCHESTER, NH

Owner of Record: SSG, LLC ATTN: FENTON GROEN
120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
P1



Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

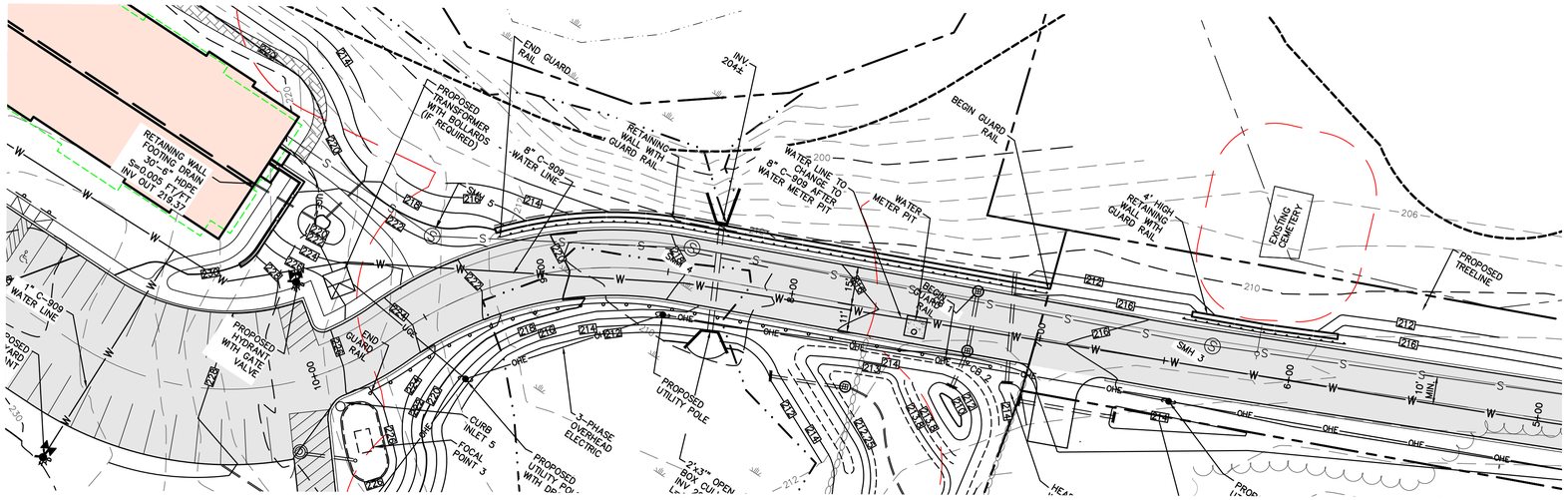
Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

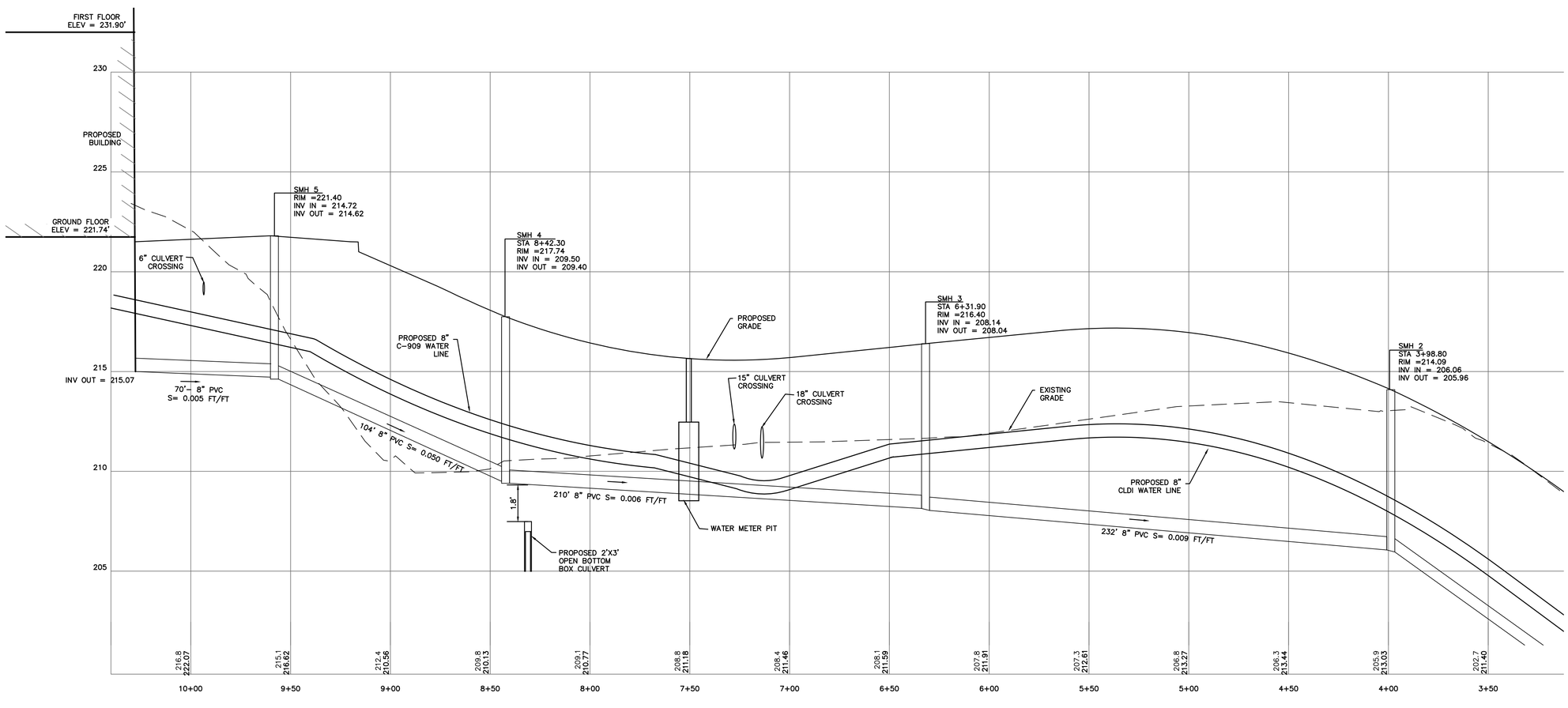
Plan Name:	PLAN AND PROFILE
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.

P2

SHEET 15 OF 29
JBE PROJECT NO.21137





GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft Horiz.
1 inch = 3 ft Vert.

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

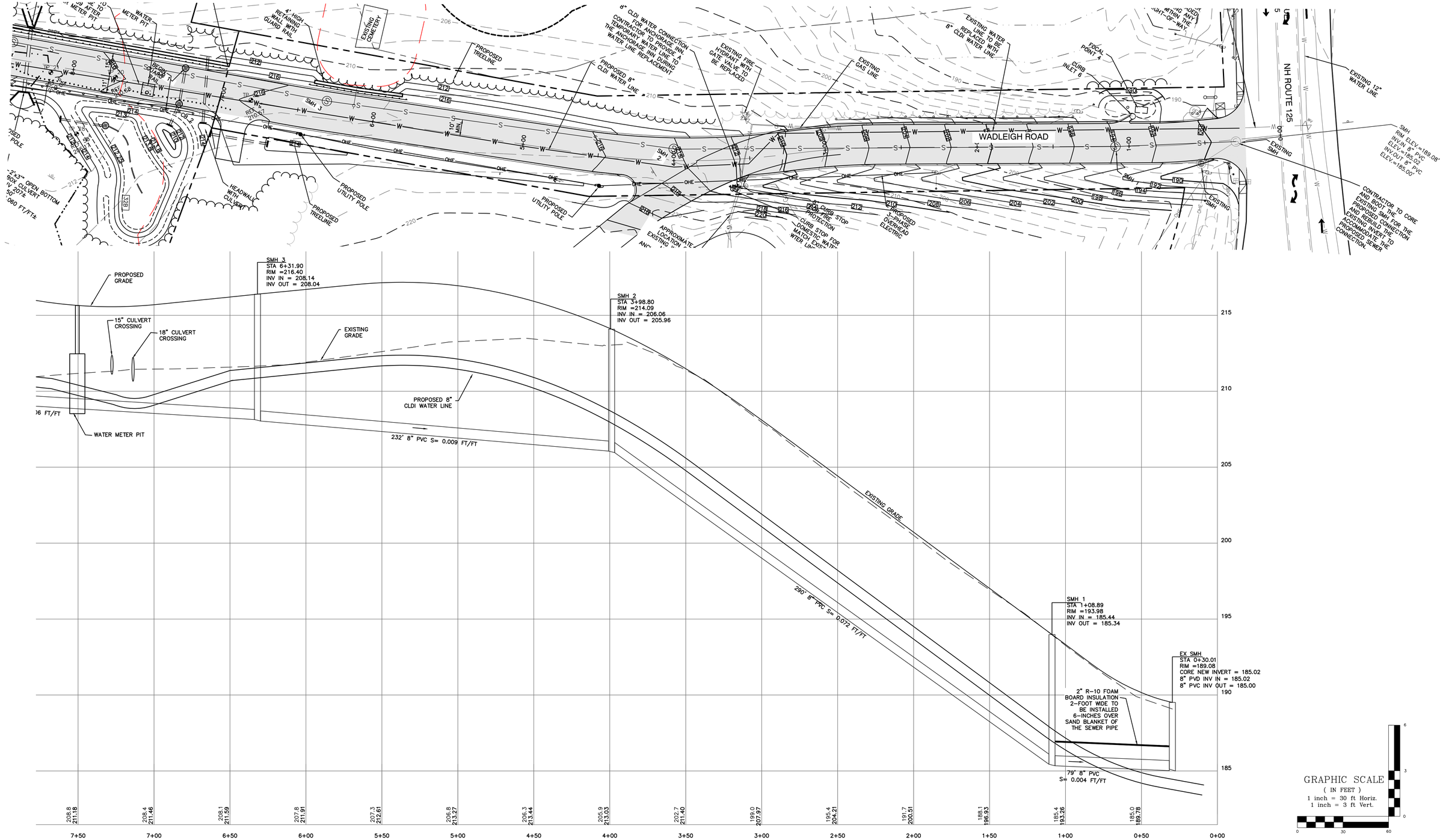
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	SEWER PLAN AND PROFILE
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
P3
SHEET 16 OF 29
JBE PROJECT NO.21137



Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

Designed and Produced in NH

Jones & Beach Engineers, Inc.

Civil Engineering Services

85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885

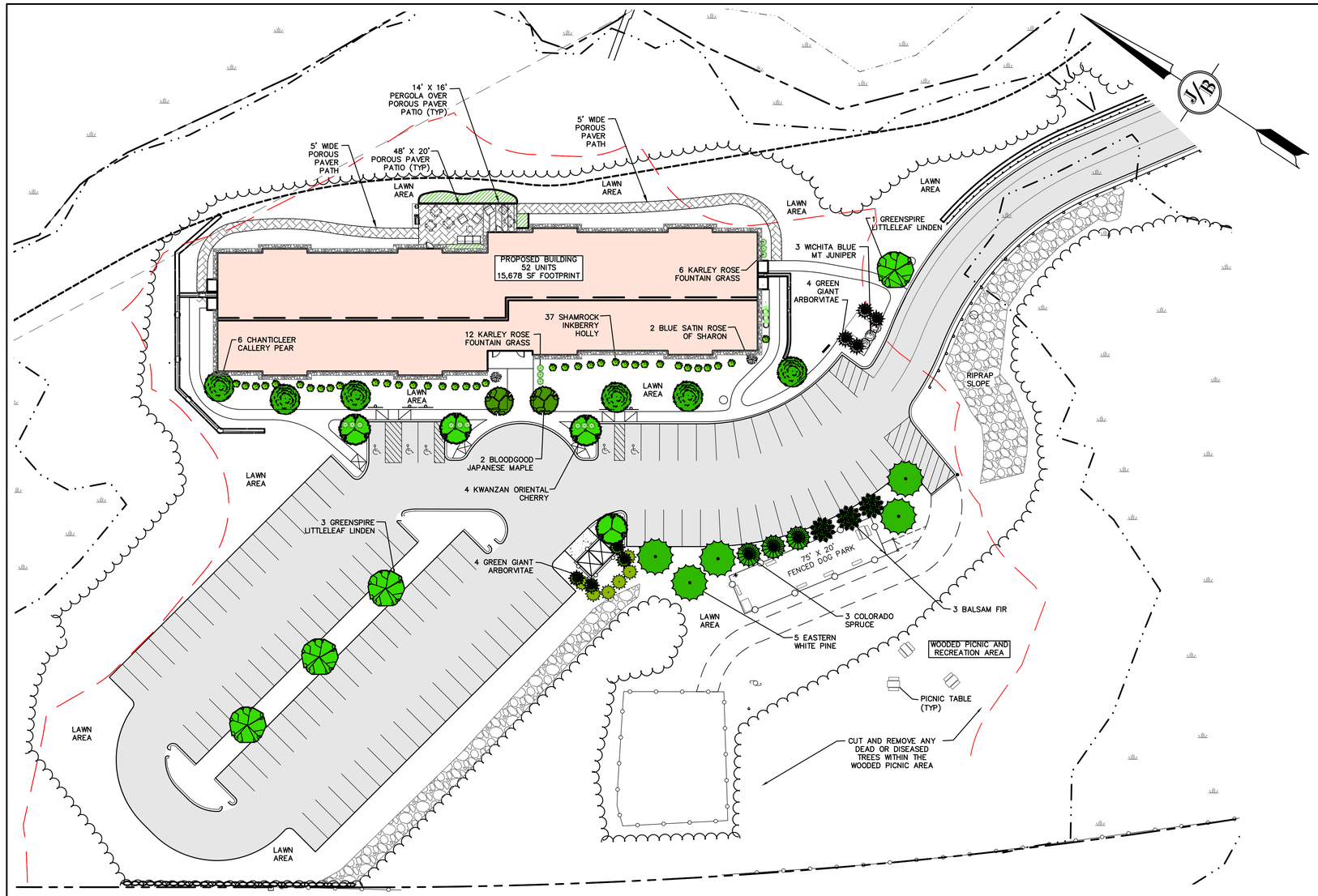
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

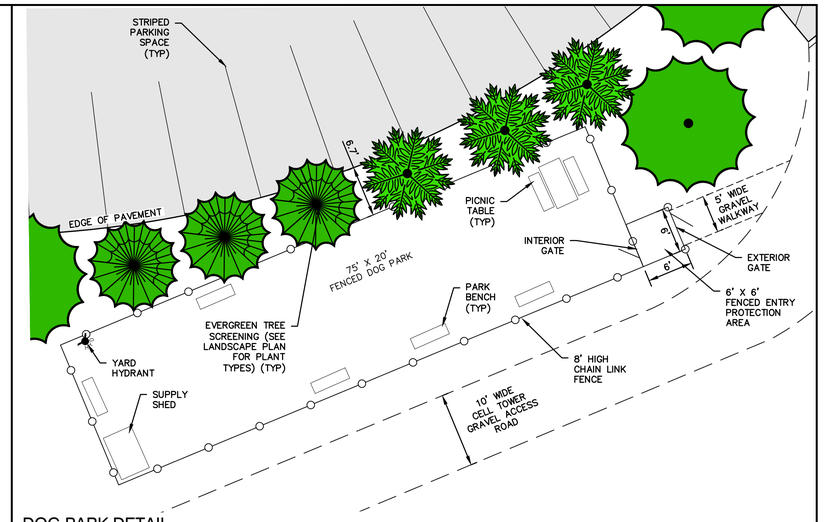
Plan Name:	SEWER PLAN AND PROFILE
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.

P4

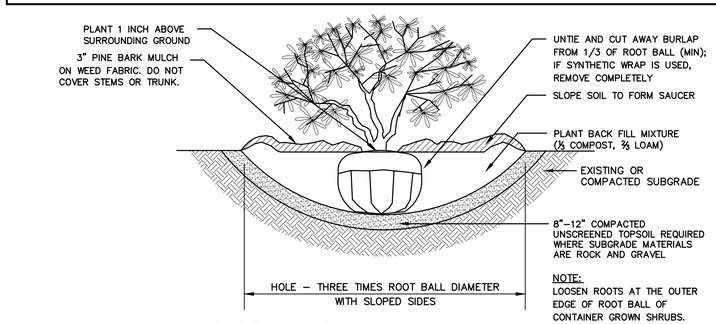
SHEET 17 OF 29
JBE PROJECT NO.21137





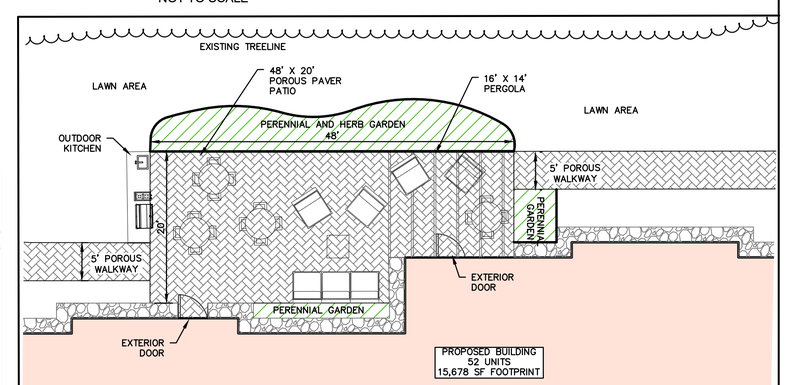
DOG PARK DETAIL

SCALE: 1" = 10'



SHRUB PLANTING

NOT TO SCALE



PATIO AREA

SCALE: 1" = 10'

LANDSCAPE NOTES:

1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
2. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THE DRAWINGS.
3. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, UPON DELIVERY OR AT THE JOB SITE WHILE WORK IS ON–GOING FOR CONFORMITY TO SPECIFIED QUALITY, SIZE AND VARIETY.
4. PLANTS FURNISHED IN CONTAINERS SHALL HAVE THE ROOTS WELL ESTABLISHED IN THE SOIL MASS AND SHALL HAVE AT LEAST ONE (1) GROWING SEASON. ROOT–BOUND PLANTS OR INADEQUATELY SIZED CONTAINERS TO SUPPORT THE PLANT MAY BE DEEMED UNACCEPTABLE.
5. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24–HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN IF NECESSARY, DURING THE FIRST GROWING SEASON.
6. BY THE END OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL HAVE REPLACED ANY PLANT MATERIAL THAT IS MISSING, NOT TRUE TO SIZE AS SPECIFIED, THAT HAS DIED, LOST NATURAL SHAPE DUE TO DEAD BRANCHES, EXCESSIVE PRUNING OR INADEQUATE OR IMPROPER CARE, OR THAT IS, IN THE OPINION OF THE LANDSCAPE ARCHITECT, IN UNHEALTHY OR UNSIGHTLY CONDITION.
7. ALL LANDSCAPING ON THE PLANS SHALL BE MAINTAINED AND DEAD OR DYING VEGETATOIN SHALL BE REPLACED IN A TIMELY MANNER.
8. ALL LANDSCAPE AREAS TO BE GRASS COMMON TO REGION, EXCEPT FOR INTERIOR LANDSCAPED ISLANDS OR WHERE OTHER PLANT MATERIAL IS SPECIFIED.
9. ALL TREES AND SHRUBS SHALL BE PLANTED IN MULCH BEDS WITH EDGE STRIPS TO SEPARATE TURF GRASS AREAS.
10. THE CONTRACTOR SHALL REMOVE WEEDS, ROCKS, CONSTRUCTION ITEMS, ETC. FROM ANY LANDSCAPE AREA SO DESIGNATED TO REMAIN, WHETHER ON OR OFF–SITE. GRASS SEED OR PINE BARK MULCH SHALL BE APPLIED AS DEPICTED ON PLANS.
11. ALL LANDSCAPING SHALL MEET THE CITY STANDARDS AND REGULATIONS.
12. ALL MULCH AREAS SHALL RECEIVE A 3" LAYER OF SHREDDED PINE BARK MULCH OVER A 10 MIL WEED MAT EQUAL TO "WEEDBLOCK" BY EASY GARDENER OR DEWITT WEED BARRIER.
13. ALL LANDSCAPED AREAS SHALL HAVE SELECT MATERIALS REMOVED TO A DEPTH OF AT LEAST 9" BELOW FINISH GRADE. THE RESULTING VOID IS TO BE FILLED WITH A MINIMUM OF 9" HIGH–QUALITY SCREENED LOAM AMENDED WITH 3" OF AGED ORGANIC COMPOST.
14. THIS PLAN IS INTENDED FOR LANDSCAPING PURPOSES ONLY. REFER TO CIVIL/SITE DRAWINGS FOR OTHER SITE CONSTRUCTION INFORMATION.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

WADLEIGH RD APARTMENT BUILDING PLANT LIST

Plants			
Quantity	Botanical Name	Common Name	Size
3	Abies balsamea	BALSAM FIR	8-10 FT. HT.
2	Acer palmatum 'Bloodgood'	BLOODGOOD JAPANESE MAPLE	15 GALLON
3	Juniperus scopulorum 'Wichita Blue'	WICHITA BLUE MT JUNIPER	7-8 FT. HT.
4	Picea pungens	COLORADO SPRUCE	8-10 FT. HT.
5	Pinus strobus	EASTERN WHITE PINE	10-12 FT. HT.
4	Prunus serrulata 'Kwanzan'	KWANZAN ORIENTAL CHERRY	2.5" CALIPER
6	Pyrus calleryana 'Chanticleer'	CHANTICLEER CALLERY PEAR	2.5" CALIPER
8	Thuja plicata 'Green Giant'	GREEN GIANT ARBORVITAE	7-8 FT. HT.
3	Tilia cordata 'Greenspire'	GREENSPIRE LITTLELEAF LINDEN	3" CALIPER
2	Hibiscus syriacus 'DVPazurri'	BLUE SATIN ROSE OF SHARON	5 GALLON
37	Ilex glabra 'Shamrock'	SHAMROCK INKBERRY HOLLY	5 GALLON
18	Pennisetum orientale 'Karley Rose'	KARLEY ROSE FOUNTAIN GRASS	2 GALLON

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.:21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

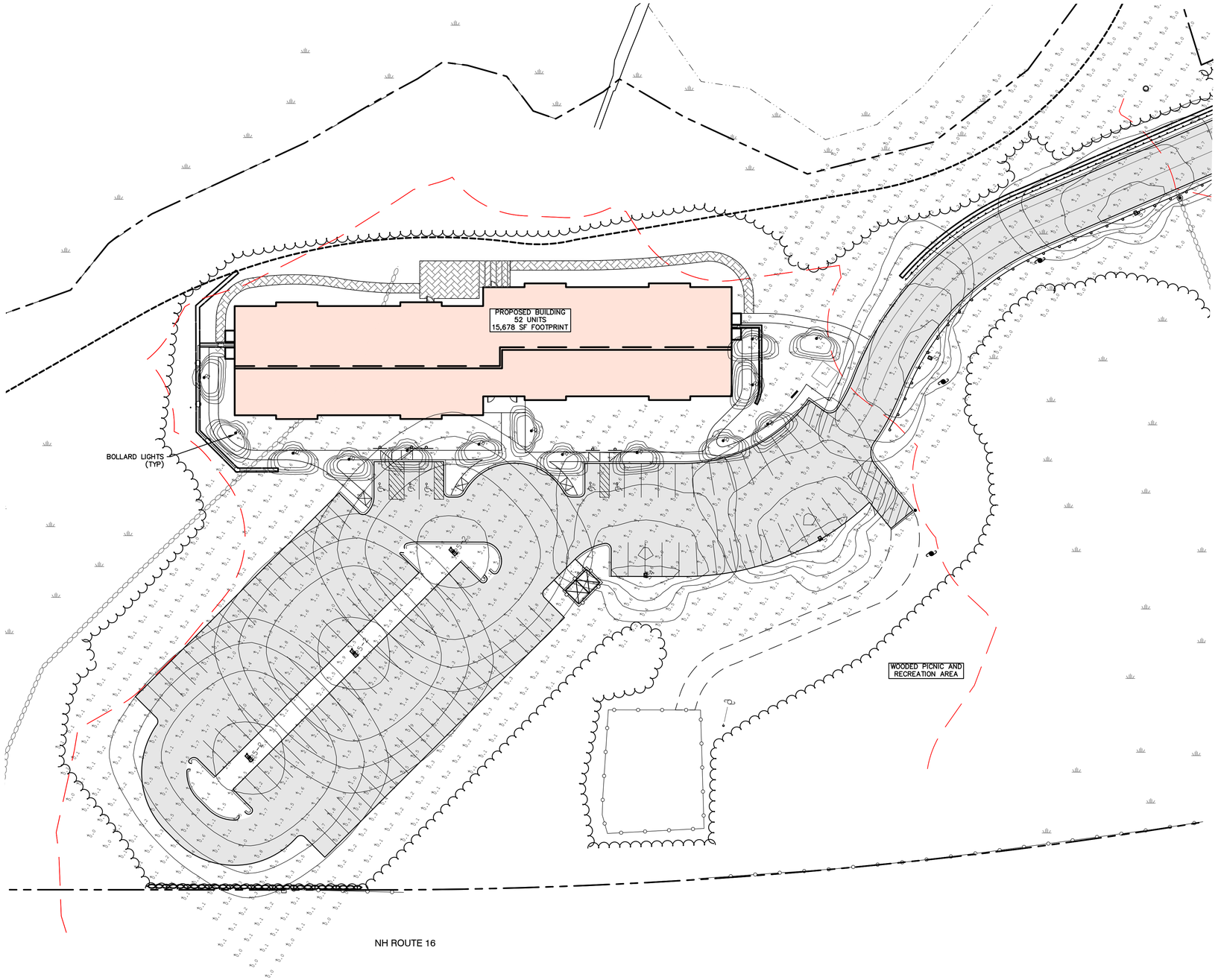
Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	LANDSCAPE PLAN
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.

L1

SHEET 18 OF 29
JBE PROJECT NO. 21137



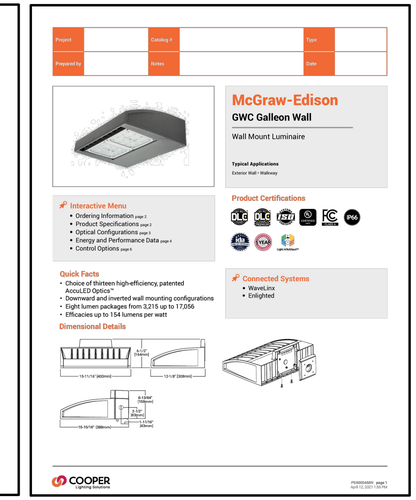
GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

LIGHTING AND ELECTRICAL NOTES:

1. SITE ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.
2. CONTRACTOR SHALL INSTALL PROPOSED LIGHT POLES ACCORDING TO TOWN REGULATIONS.
3. ALL OUTDOOR LIGHTING SYSTEMS SHALL BE EQUIPPED WITH TIMERS TO REDUCE ILLUMINATION LEVELS TO NON-OPERATIONAL VALUES PER TOWN REGULATIONS.
4. LIGHTING CONDUIT SHALL BE SCHEDULE 40 PVC, AND SHALL BE INSTALLED IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE. CONTRACTOR SHALL PROVIDE EXCAVATION AND BACKFILL.
5. ILLUMINATION READINGS SHOWN ARE BASED ON A TOTAL LLF OF 0.75 AT GRADE. ILLUMINATION READINGS SHOWN ARE IN UNITS OF FOOT-CANDLES.
6. LIGHTING CALCULATIONS SHOWN ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM AND SAFETY.
7. ALL LIGHTING FIXTURES SHALL BE FULL CUT-OFF DARK-SKY COMPLIANT, UNLESS OTHERWISE NOTED.
8. NL INDICATES THAT THIS LUMINAIRE SHALL BE ON A NIGHT LIGHT CIRCUIT. FL INDICATES THAT THIS LUMINAIRE SHALL BE A FLOOD LIGHT FIXTURE. MOUNTING BRACKET FOR THIS FL FIXTURE SHALL BE MOUNTED 25' ABOVE BOTTOM OF POLE BASE FOR ALL LIGHT POLES CLOSEST TO STOREFRONT. THESE DESIGNATIONS INDICATE WHAT PHASE LIGHTS ARE WIRED TO (TYP).
9. THE PROPOSED LIGHTING CALCULATIONS AND DESIGN WAS PERFORMED BY CHARRON, INC., P.O. BOX 4550, MANCHESTER, NH 03108, ATTENTION KEN SWEENEY. ALL LIGHTS SHOULD BE PURCHASED FROM THIS COMPANY, OR AN EQUAL LIGHTING DESIGN SHOULD BE SUBMITTED FOR REVIEW IF EQUAL SUBSTITUTIONS ARE PROPOSED BY THE CONTRACTOR OR OWNER.



Luminaire Schedule				
Symbol	Qty	Label	Arrangement	Description
	14	B	Single	BRT6-A2-730-U-T3-42-BK
	3	P5-2	Back-Back	GLEON-SA1D-740-U-5WQ / SSS4A20SFN2 (20' AFG)
	2	S3	Single	GLEON-SA1C-740-U-SL3 / SSS4A20SFN1 (20' AFG)
	2	S4	Single	GLEON-SA1C-740-U-T4FT / SSS4A20SFN1 (20' AFG)

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

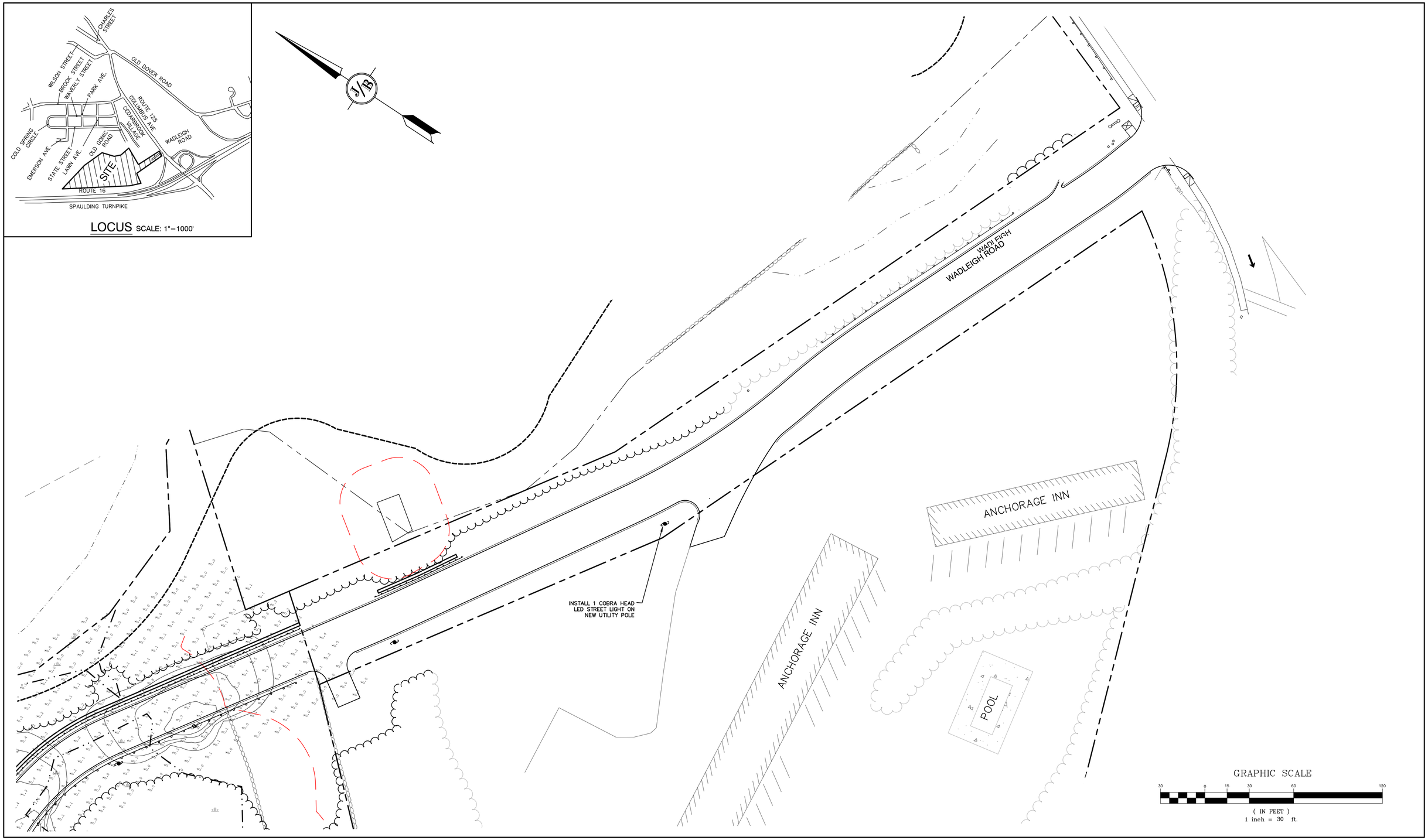
Plan Name: LIGHTING PLAN

Project: WADLEIGH ROAD APARTMENTS
ROCHESTER, NH

Owner of Record: SSG, LLC ATTN: FENTON GROEN
120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
L2

LOCUS SCALE: 1"=1000'



Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

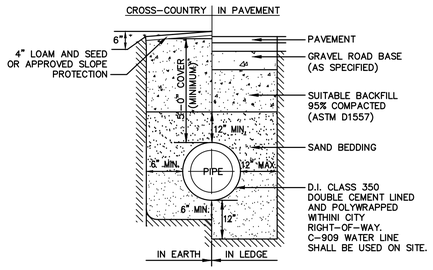
Designed and Produced in NH
J/B Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	LIGHTING PLAN
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.

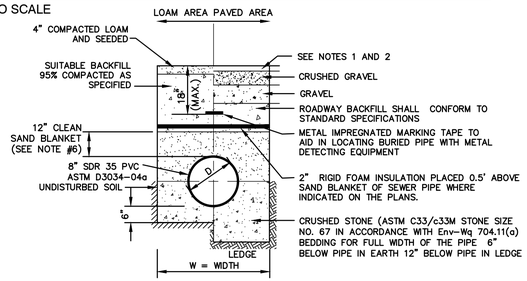
L3

SHEET 20 OF 29
JBE PROJECT NO. 21137



WATER SYSTEM TRENCH

NOT TO SCALE

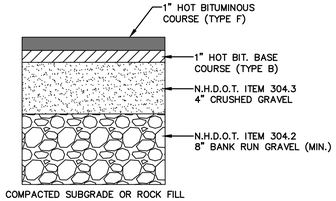


NOTES:

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO PAVEMENT DETAILS.
2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPECIFICATIONS.
3. TRENCH BACKFILL SHALL CONFORM WITH ENV. Wq 704.11(h) AND BE FREE OF DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT OR CLAY, EXCAVATED LEDGE OR ROCKS OVER SIX INCHES.
4. W= MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12" INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, WIDTH SHALL BE NO MORE THAN 36"; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, WIDTH SHALL BE 24 INCHES PLUS PIPE O.D. WIDTH SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
5. RIGID FOAM INSULATION TO BE PROVIDED WHERE COVER IN THE ROADWAY IS LESS THAN 6' AND CROSS COUNTRY IS LESS THAN 4', PURSUANT TO DES WAIVER BEING ISSUED.
6. PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND, FREE FROM ORGANIC MATERIALS, GRADED SUCH THAT 100% PASSES A 1/2 " SIEVE AND A MAXIMUM OF 15% PASSES A #200 SIEVE IN ACCORDANCE WITH Env-Wq 704.11(b).
7. JOINT SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL AND CERTIFIED BY THE MANUFACTURER AS CONFORMING TO THE ASTM D3212 STANDARD IN EFFECT WHEN THE JOINT SEALS WERE MANUFACTURED, AND SHALL BE PUSH-ON, BELL-AND-SPIGOT TYPE PER Env-Wq 704.05 (e).

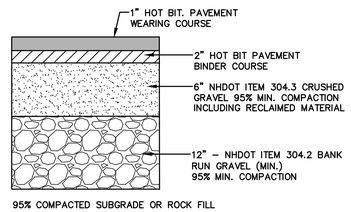
SEWER TRENCH

NOT TO SCALE



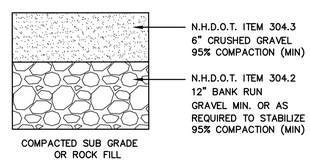
BITUMINOUS SIDEWALK DETAIL

NOT TO SCALE



TYPICAL BITUMINOUS PAVEMENT

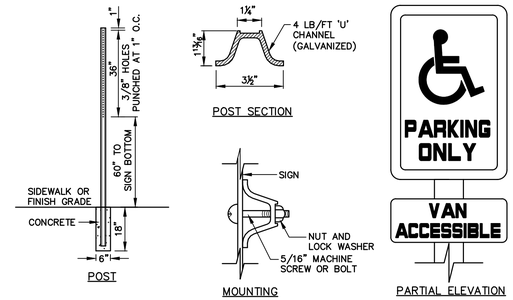
NOT TO SCALE



NOTE: IN AREAS OF ROCK EXCAVATION, MINIMUM 9" BANK RUN GRAVEL SHALL BE PLACED

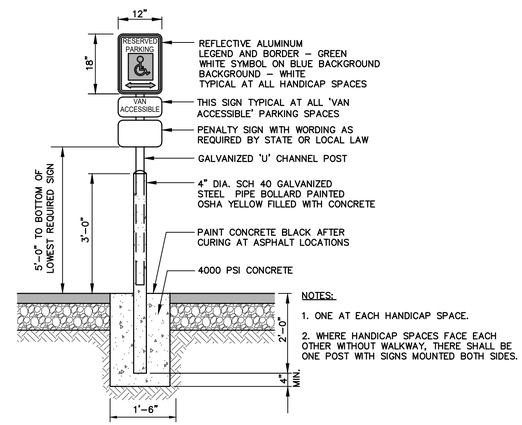
GRAVEL SECTION

NOT TO SCALE



HANDICAP SIGN DETAILS

NOT TO SCALE

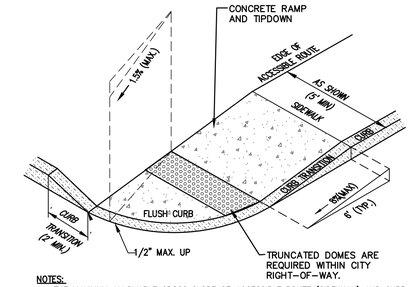


NOTES:

1. ONE AT EACH HANDICAP SPACE.
2. WHERE HANDICAP SPACES FACE EACH OTHER WITHOUT WALKWAY, THERE SHALL BE ONE POST WITH SIGNS MOUNTED BOTH SIDES.

HANDICAP PARKING SIGN (R7-8)

NOT TO SCALE

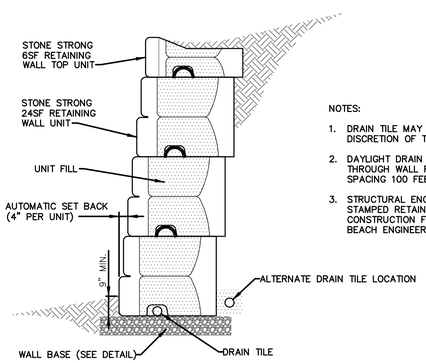


NOTES:

1. THE MAXIMUM ALLOWABLE CROSS SLOPE OF ACCESSIBLE ROUTE (SIDEWALK) AND CURB SHALL BE 1.5%.
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE (SIDEWALK) CURB RAMPS SHALL BE 8%.
4. A MINIMUM OF 4 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (i.e., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SECTION FOR RAMP CONSTRUCTION.

ACCESSIBLE CURB RAMP (TYPE 'B')

NOT TO SCALE



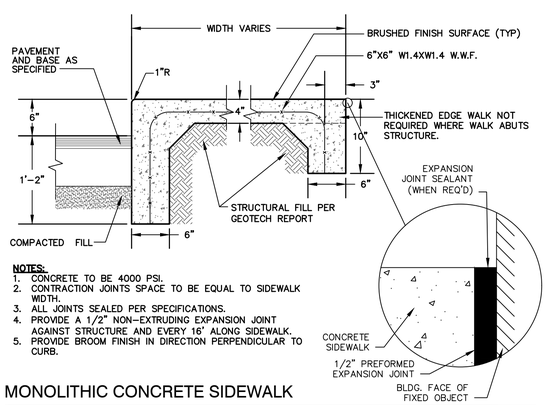
GRAVITY WALL CROSS SECTION

NOTES:

1. DRAIN TILE MAY BE ELIMINATED AT THE DISCRETION OF THE SITE ENGINEER.
2. DAYLIGHT DRAIN TILE AT THE LOW POINTS THROUGH WALL FACE OR AT ENDS. MAXIMUM SPACING 100 FEET OR PER SITE CONDITIONS.
3. STRUCTURAL ENGINEER SHALL PROVIDE A STAMPED RETAINING WALL DESIGN PRIOR TO CONSTRUCTION FOR REVIEW BY JONES AND BEACH ENGINEERS, INC. AND BY THE CITY.

STONE STRONG RETAINING WALL

NOT TO SCALE

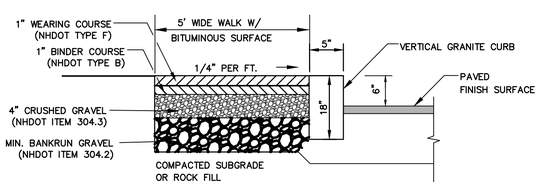


NOTES:

1. CONCRETE TO BE 4000 PSI.
2. CONTRACTION JOINTS SPACE TO BE EQUAL TO SIDEWALK WIDTH.
3. ALL JOINTS SEALED PER SPECIFICATIONS.
4. PROVIDE A 1/2" NON-EXTRUDING EXPANSION JOINT AGAINST STRUCTURE AND EVERY 16' ALONG SIDEWALK.
5. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.

MONOLITHIC CONCRETE SIDEWALK

NOT TO SCALE

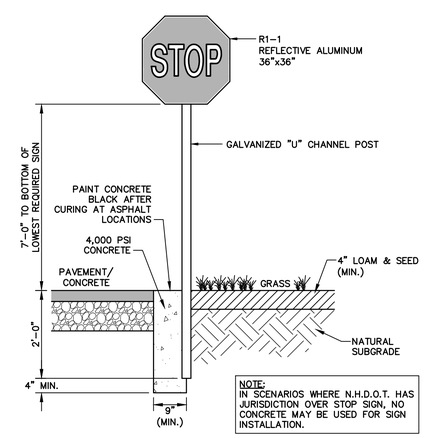


NOTES:

1. JOINTS BETWEEN STONES SHALL BE MORTARED.
2. EDGING TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE.

BIT. SIDEWALK W/ VERTICAL GRANITE CURB

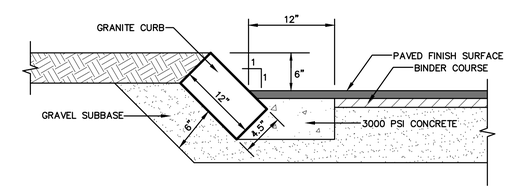
NOT TO SCALE



NOTE:
IN SCENARIOS WHERE N.H.D.O.T. HAS JURISDICTION OVER STOP SIGN, NO CONCRETE MAY BE USED FOR SIGN INSTALLATION.

STOP SIGN (R1-1)

NOT TO SCALE



NOTES:

1. CURB TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE.
2. JOINTS BETWEEN STONES SHALL BE MORTARED.

SLOPED GRANITE CURB

NOT TO SCALE

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: AS NOTED	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

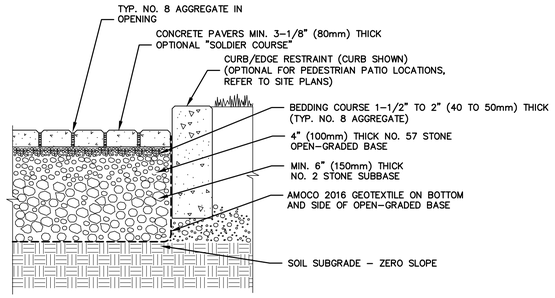
Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	DETAIL SHEET
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.

D1

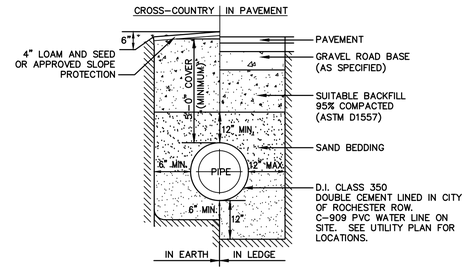
SHEET 21 OF 29
JBE PROJECT NO. 21137



NOTES:
1. 2 3/8" (60 MM) THICK PAVERS MAY BE USED IN PEDESTRIAN APPLICATIONS.
2. NO. 2 STONE SUBBASE THICKNESS VARIES WITH DESIGN. CONSULT ICPI PERMEABLE INTERLOCKING CONCRETE PAVEMENT MANUAL.
3. INSTALLATION TO BE PERFORMED TO MANUFACTURER'S GUIDLINES AND THE PERMEABLE INTERLOCKING CONCRETE PAVEMENT SPECIFICATIONS.

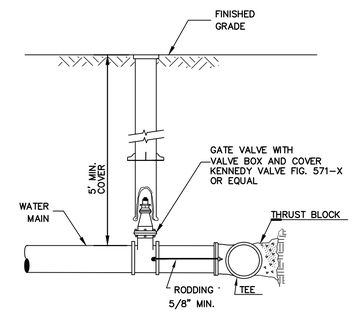
PERMEABLE CONCRETE PAVER DETAIL (FULL EXFILTRATION)

NOT TO SCALE



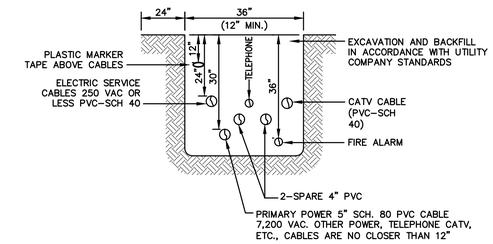
WATER SYSTEM TRENCH

NOT TO SCALE



BURIED GATE VALVE DETAIL

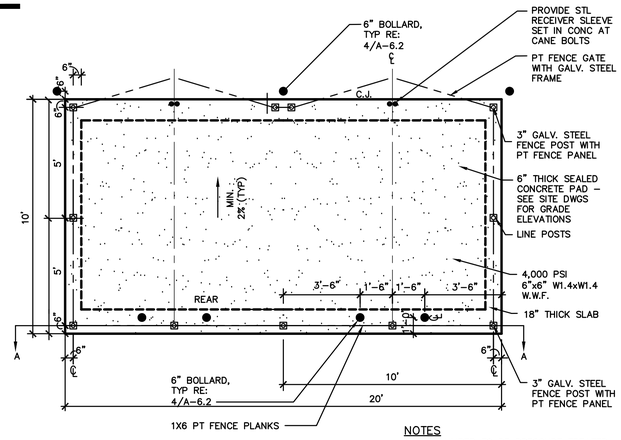
NOT TO SCALE



NOTE: ALL UTILITIES SHALL BE REVIEWED AND APPROVED BY APPROPRIATE UTILITY COMPANY.

UTILITY TRENCH

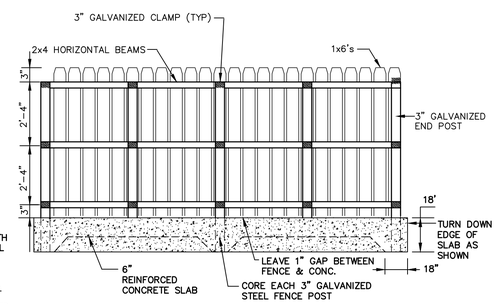
NOT TO SCALE



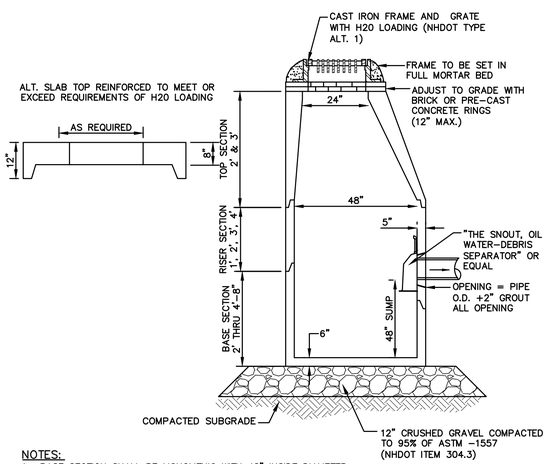
NOTES
1. ALL LUMBER TO BE PRESSURE TREATED.
2. WOOD FENCE TO BE PAINTED OR STAINED TO MATCH BUILDING FOUNDATION.
3. DUMPSTER SIZE VARIES, SEE SITE PLANS FOR SCREENING SIZE

DUMPSTER ENCLOSURE PLAN

NOT TO SCALE



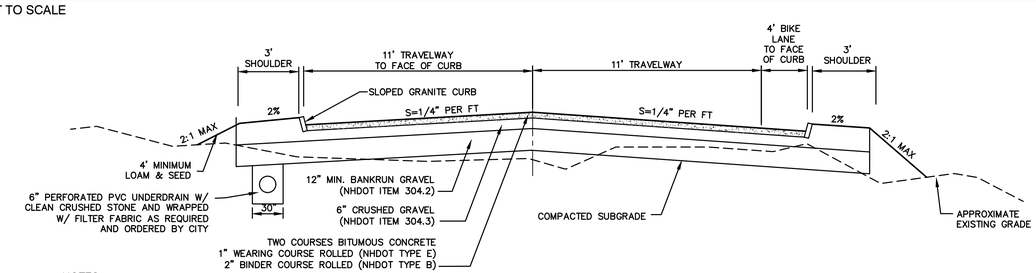
SECTION A-A



NOTES:
1. BASE SECTION SHALL BE MONOLITHIC WITH 48" INSIDE DIAMETER.
2. ALL SECTIONS SHALL BE DESIGNED FOR H20 LOADING.
3. CONCRETE SHALL BE COMPRESSIVE STRENGTH 4000 PSI, TYPE II CEMENT.
4. FRAMES AND GRATES SHALL BE HEAVY DUTY AND DESIGNED FOR H20 LOADING
5. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS SO AS TO BE WATERTIGHT.
6. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RUBBER.
7. ALL CATCH BASIN FRAMES AND GRATES SHALL BE NHDOT CATCH BASIN TYPE ALTERNATE 1 OR NEENAH R-3570 OR APPROVED EQUAL (24"x24" TYPICAL).
8. STANDARD CATCH BASIN FRAME AND GRATE(S) SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM, BUT NO MORE THAN 12"), OR PRECAST CONCRETE 'DONUTS'.
9. ALL CATCH BASINS ARE TO BE FITTED WITH GREASE HOODS.

CATCH BASIN WITH GREASE HOOD

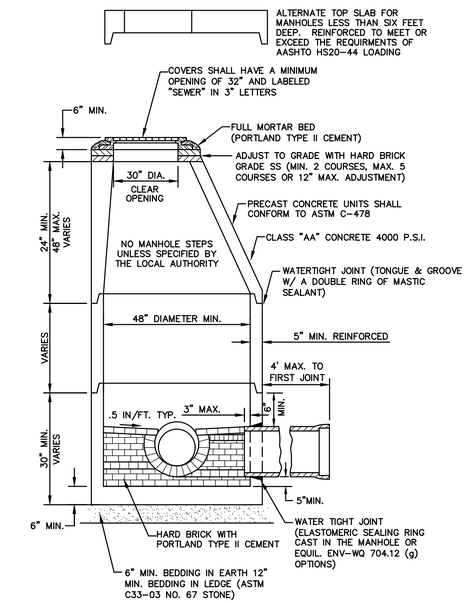
NOT TO SCALE



NOTES:
1. REMOVE ALL ORGANICS, TOPSOIL AND MATERIAL YIELDING TO A 10 TON ROLLER. SUBBASE AREAS THAT CONTAIN UNSUITABLE MATERIALS MUST BE EXCAVATED TO A DEPTH NO LESS THAN 36" BELOW FINISH GRADE AND BE REPLACED WITH GRAVEL COMPACTED TO 95%.
2. ALL MATERIALS TO BE AS SPECIFIED PER TOWN STANDARDS AND NHDOT, WHICHEVER IS MOST STRINGENT. GRADATION AND COMPACTION TEST RESULTS (95% MIN.) SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.
3. TOWN MAY REQUIRE UNDERDRAIN AND/OR ADDITIONAL DRAINAGE IF SOIL CONDITIONS WARRANT.
4. WOVEN GEOTEXTILE FABRIC SHALL BE PLACED ABOVE SUBGRADE AT ALL WETLAND CROSSINGS.

TYPICAL ROADWAY SECTION W/CURBING

NOT TO SCALE



NOTES:
1. PER NHDES ENV-WQ 704.13(C), MORTAR USED IN MANHOLE CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING:
   a. MORTAR SHALL BE COMPOSED OF TYPE II PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION
   b. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE PER TABLE 704-4:
      (1) 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR
      (2) 4.5 PARTS SAND, ONE PART CEMENT AND 0.5 PART HYDRATED LIME;
   c. CEMENT SHALL BE TYPE II PORTLAND CEMENT THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM C150/C150M STANDARD IN EFFECT AT THE TIME THE CEMENT WAS MANUFACTURED
   d. HYDRATED LIME SHALL BE TYPE S THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM C207 STANDARD IN EFFECT AT THE TIME THE HYDRATED LIME WAS PROCESSED
   e. SAND SHALL CONSIST OF INERT NATURAL SAND THAT IS CERTIFIED BY ITS SUPPLIER AS CONFORMING TO THE ASTM C33 STANDARD IN EFFECT AT THE TIME THE SAND IS PROCESSED BY 'STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES
   f. CONCRETE FOR DROP SUPPORTS SHALL CONFORM TO THE REQUIREMENT FOR CLASS AAA CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S 'STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS AVAILABLE AT:

   HTTP://WWW.NH.GOV/DOT/ORG/PROJECTDEVELOPMENT/HIGHWAYDESIGN/SPECIFICATIONS/INDEX.HTM
2. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL IN ACCORDANCE WITH ENV-WQ 704.12 (K).
3. ALL MANHOLES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH ENV-WQ 704.17 (a) THROUGH (e).
4. SEWER MANHOLE COVERS SHALL CONFORM TO ASTM A48/48M WITH A CASTING EQUAL TO CLASS 30 IN ACCORDANCE WITH ENV-WQ 704.13 (a) (8).
5. ALL PRECAST SECTIONS SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING IN ACCORDANCE WITH ENV-WQ 704.12 (J).
6. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL PER ENV-WQ 704.12(i).
7. BRICK MASONRY SHALL CONFORM TO ASTM C32 (ENV-WQ 704.12(a)(9))

SEWER MANHOLE

NOT TO SCALE

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: AS NOTED	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	DETAIL SHEET
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.

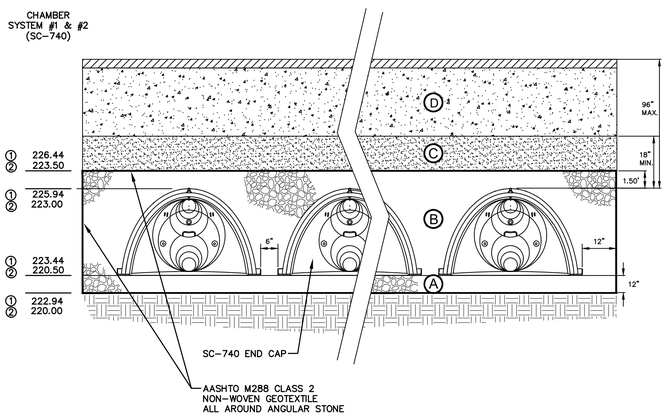
D2

SHEET 22 OF 29
JBE PROJECT NO.21137

ACCEPTABLE FILL MATERIALS
STORMTECH SC-310 AND SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO M43 DESIGNATION	AASHTO M145 DESIGNATION	COMPACTION/DENSITY REQUIREMENT
D	PAVEMENT SUBGRADE, DEPTH(S) PER SPECIFICATIONS	PAVEMENT SUBGRADE, MATERIALS PER SPECIFICATIONS	N/A	N/A	PREPARE PER SPECIFICATIONS AND PLANS. PAVED INSTALLATIONS HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	FILL MATERIAL FROM 1.50' ABOVE CHAMBERS TO BOTTOM OF PAVEMENT SUBGRADE	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES.	3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	A-1 A-2 A-3	COMPACT IN 6" LIFTS TO A MINIMUM 95% STANDARD PROCTOR DENSITY. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 LBS. DYNAMIC FORCE NOT TO EXCEED 20,000 LBS.
B	EMBEDMENT STONE SURROUNDING AND TO A 1.50' ELEVATION ABOVE CHAMBERS	WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN ¾ - 2 INCH	3, 357, 4, 467, 5, 56, 57	N/A	NO COMPACTION REQUIRED
A	12 " FOUNDATION STONE BELOW CHAMBERS	WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN ¾ - 2 INCH	3, 357, 4, 467, 5, 56, 57	N/A	PLATE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY

PLEASE NOTE: THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE WASHED CRUSHED ANGULAR. FOR EXAMPLE, THE STONE MUST BE SPECIFIED AS WASHED, CRUSHED, ANGULAR NO. 4 STONE.

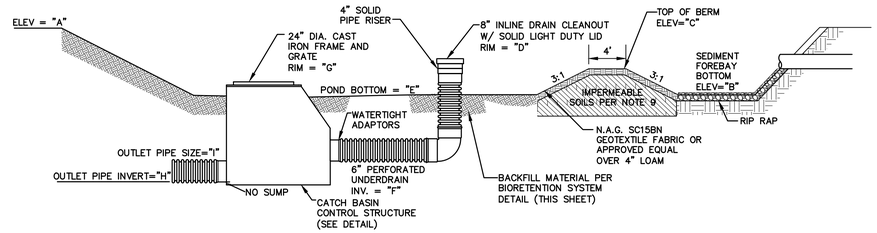


NOTES:

1. SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
   PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

TYPICAL SC-740 CROSS-SECTION (OR EQUAL)

NOT TO SCALE



BIORETENTION SYSTEM TABLE

	ELEVATIONS/DIMENSIONS								
	A	B	C	D	E	F	G	H	I
SYSTEM P3	215.40	210.0	213.8	214.0	212.25	208.83	214.50	208.50	8"

nyloplast usa inc
3130 Verona Avenue – Buford, Georgia 30518
Tel: (770) 932-2443 – Fax: (770) 932-2490

BIORETENTION SYSTEM SECTION

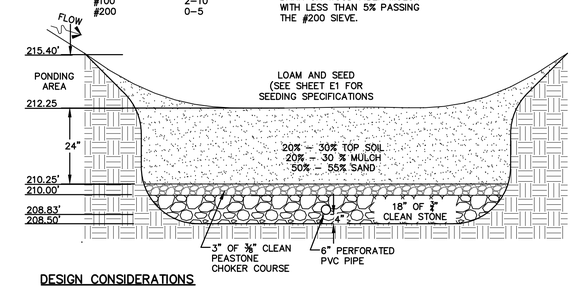
NOT TO SCALE

SAND SPECIFICATION

SIEVE SIZE	% BY WEIGHT
3"	100
#4	95–100
#8	80–100
#16	50–85
#30	25–60
#60	10–30
#100	2–10
#200	0–5

TOPSOIL SPECIFICATION
LOAMY SAND TOPSOIL WITH MINIMAL CLAY CONTENT AND BETWEEN 15 TO 25% FINES PASSING THE #200 SIEVE.

MULCH SPECIFICATION
MODERATELY FINE, SHREDDED BARK OR WOOD FIBER MULCH WITH LESS THAN 5% PASSING THE #200 SIEVE.



DESIGN CONSIDERATIONS

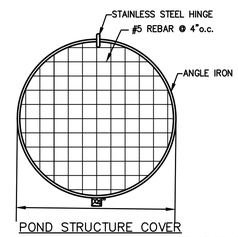
1. DO NOT PLACE BIORETENTION SYSTEMS INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
2. DO NOT DISCHARGE SEDIMENT–LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUN–OFF, WATER FROM EXCAVATIONS) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
3. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

MAINTENANCE REQUIREMENTS:

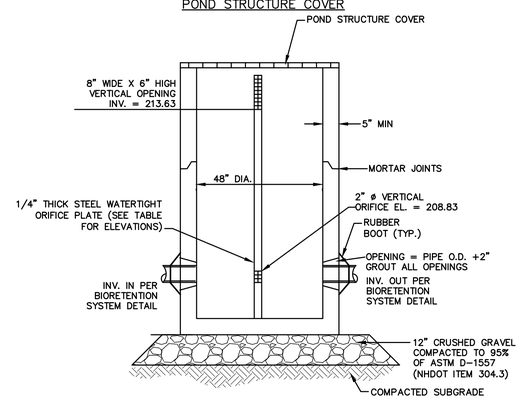
1. SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EVENT EXCEEDING 2.5 INCHES IN A 24 HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS WARRANTED BY SUCH INSPECTION.
2. PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.
3. TRASH AND DEBRIS SHOULD BE REMOVED AT EACH INSPECTION.
4. AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72 HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.
5. VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING PRUNING, REMOVAL AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.
6. COMPACTION AND MATERIALS TESTING SERVICES SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER RETAINED BY THE OWNER.

BIORETENTION SYSTEM

NOT TO SCALE

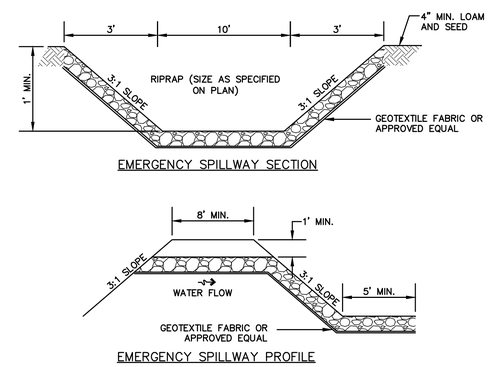


POND STRUCTURE COVER



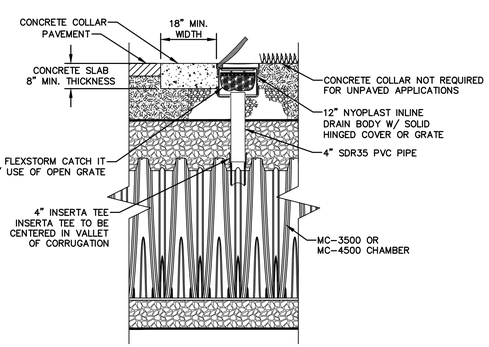
CATCH BASIN CONTROL STRUCTURE (CBCS)

NOT TO SCALE



EMERGENCY SPILLWAY

NOT TO SCALE



TYPICAL SC-740 4" INSPECTION PORT

NOT TO SCALE

GENERAL NOTES

1. STORMTECH LLC ("STORMTECH") REQUIRES INSTALLING CONTRACTORS TO USE AND UNDERSTAND STORMTECH'S LATEST INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION.
2. STORMTECH OFFERS INSTALLATION CONSULTATIONS TO INSTALLING CONTRACTORS. CONTACT OUR TECHNICAL SERVICE DEPARTMENT OR LOCAL STORMTECH REPRESENTATIVE AT LEAST 30 DAYS PRIOR TO SYSTEM INSTALLATION TO ARRANGE A PRE–INSTALLATION CONSULTATION. OUR REPRESENTATIVES CAN THEN ANSWER QUESTIONS OR ADDRESS COMMENTS ON THE STORMTECH CHAMBER SYSTEM AND INFORM THE INSTALLING CONTRACTOR OF THE MINIMUM INSTALLATION REQUIREMENTS BEFORE BEGINNING THE SYSTEM'S CONSTRUCTION. CALL 860–529–8188 TO SPEAK TO A TECHNICAL SERVICE REPRESENTATIVE OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF OUR INSTALLATION INSTRUCTIONS.
3. STORMTECH'S REQUIREMENTS FOR SYSTEMS WITH PAVEMENT DESIGN (ASPHALT, CONCRETE PAVERS, ETC.): MINIMUM COVER IS 24 INCHES NOT INCLUDING PAVEMENT; MAXIMUM COVER IS 6.5 FEET INCLUDING PAVEMENT. FOR INSTALLATIONS THAT DO NOT INCLUDE PAVEMENT, WHERE RUTTING FROM VEHICLES MAY OCCUR, MINIMUM REQUIRED COVER IS 24 INCHES, MAXIMUM COVER IS 6.5 FEET.
4. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE DESIGN ENGINEER.
5. AASHTO M288 CLASS 2 NON–WOVEN GEOTEXTILE (FILTER FABRIC) MUST BE USED AS INDICATED IN THE PROJECT PLANS.
6. STONE PLACEMENT BETWEEN CHAMBERS ROWS AND AROUND PERIMETER MUST FOLLOW INSTRUCTIONS AS INDICATED IN THE MOST CURRENT VERSION OF STORMTECH'S INSTALLATION INSTRUCTIONS.
7. BACKFILLING OVER THE CHAMBERS MUST FOLLOW REQUIREMENTS AS INDICATED IN THE MOST CURRENT VERSION OF STORMTECH'S INSTALLATION INSTRUCTIONS.
8. THE CONTRACTOR MUST REFER TO STORMTECH'S INSTALLATION INSTRUCTIONS FOR A TABLE OF ACCEPTABLE VEHICLE LOADS AT VARIOUS DEPTHS OF COVER. THIS INFORMATION IS ALSO AVAILABLE AT STORMTECH'S WEBSITE: WWW.STORMTECH.COM. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING VEHICLES THAT EXCEED STORMTECH'S REQUIREMENTS FROM TRAVELING ACROSS OR PARKING OVER THE STORMWATER SYSTEM. TEMPORARY FENCING, WARNING TAPE AND APPROPRIATELY LOCATED SIGNS ARE COMMONLY USED TO PREVENT UNAUTHORIZED VEHICLES FROM ENTERING SENSITIVE CONSTRUCTION AREAS.
9. THE CONTRACTOR MUST APPLY EROSION AND SEDIMENT CONTROL MEASURES TO PROTECT THE STORMWATER SYSTEM DURING ALL PHASES OF SITE CONSTRUCTION PER LOCAL CODES AND DESIGN ENGINEER'S SPECIFICATIONS.
10. STORMTECH PRODUCT WARRANTY IS LIMITED. CONTACT STORMTECH FOR WARRANTY INFORMATION.

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: AS NOTED	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

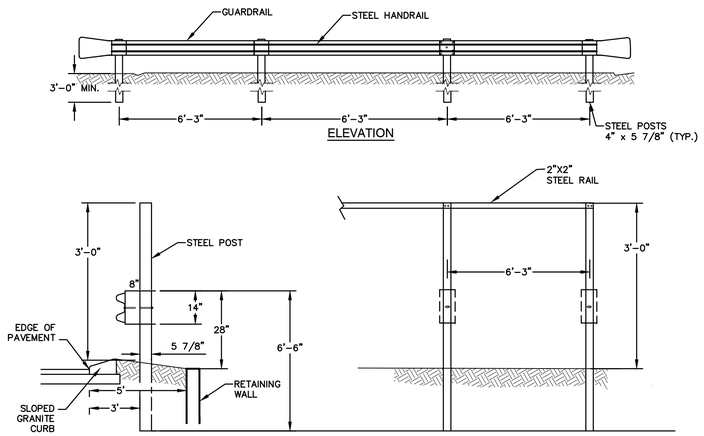
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	DETAIL SHEET
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

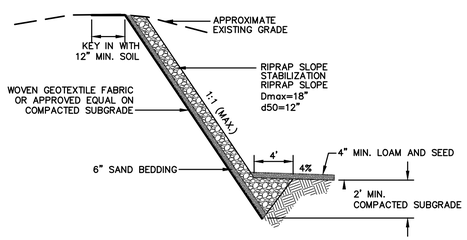
DRAWING No.
D3
SHEET 23 OF 29
JBE PROJECT NO.21137



NOTES:
1. USE IN LIGHT TRAFFIC AREAS.
2. HAND RAIL TO BE GALVANIZED STEEL TYPE (OR EQUIVALENT APPROVED BY THE ENGINEER.
3. POST BOLTS TO BE 10" W/MIN. 2 1/2" THREAD LENGTH.

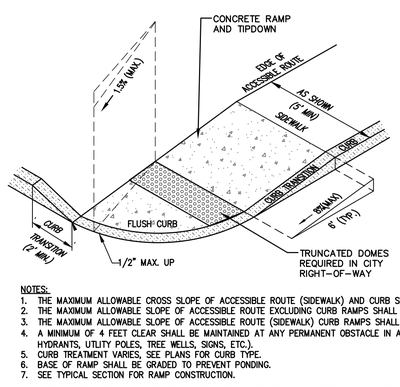
STEEL HAND RAIL DETAIL

NOT TO SCALE



RIPRAP STABILIZED STEEP SLOPE

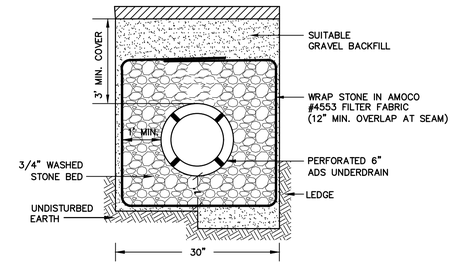
NOT TO SCALE



NOTES:
1. THE MAXIMUM ALLOWABLE CROSS SLOPE OF ACCESSIBLE ROUTE (SIDEWALK) AND CURB SHALL BE 1.5%.
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE (SIDEWALK) CURB RAMPS SHALL BE 8%.
4. A MINIMUM OF 4 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (i.e., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SECTION FOR RAMP CONSTRUCTION.

ACCESSIBLE CURB RAMP (TYPE 'B') (WITHIN CITY ROW)

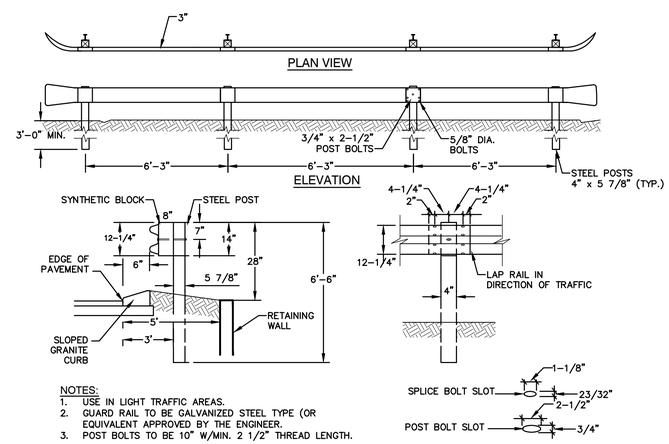
NOT TO SCALE



NOTES:
1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO PROJECT AND TOWN SPECIFICATIONS.
3. SLOPE UNDERDRAIN PIPE TO DAYLIGHT.

ROADWAY UNDERDRAIN TRENCH

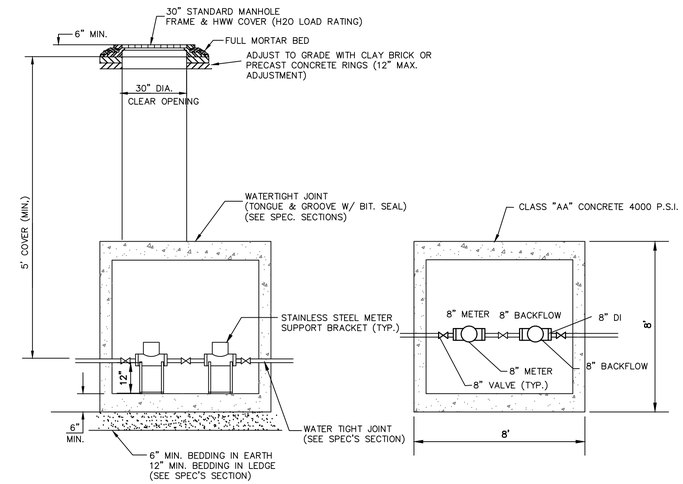
NOT TO SCALE



NOTES:
1. USE IN LIGHT TRAFFIC AREAS.
2. GUARD RAIL TO BE GALVANIZED STEEL TYPE (OR EQUIVALENT APPROVED BY THE ENGINEER.
3. POST BOLTS TO BE 10" W/MIN. 2 1/2" THREAD LENGTH.

GUARD RAIL (STEEL)

NOT TO SCALE

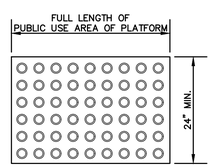


ELEVATION PLAN VIEW

NOTES
1. METER TO BE SENSUS OMNI C2 OF APPROPRIATE SIZE.
2. BACKFLOW TO BE TESTABLE DOUBLE CHECK VALVE ASSEMBLY WITH CENTER-SHAFT OR TOP HINGE CHECKS (WILKINS 350AST OR EQUAL) OF APPROPRIATE SIZE, IF APPLICATION IS DESIGNED LOW HAZARD.
3. OPTIONAL BYPASS MY BE SIZED FOR DOMESTIC SERVICE ONLY.
4. VAULT TO HAVE ADEQUATE ANTI-BOUYANCY FEATURES.
5. VAULT COVERS TO BE STAMPED WITH "WATER" AND MATCH EXISTING CITY OF ROCHESTER INFRASTRUCTURE STANDARDS
6. ISOLATION VALVES REQUIRED AROUND EQUIPMENT FOR MAINTENCE, TESTING AND SERVICE.
7. IF APPLICATION IS DESIGNATED HIGH HAZARD, THE ASSEMBLY MUST USE RPZ BACKFLOW DEVICES AND BE LOCATED IN AN ABOVE GRADE, HEATED AND INSULATED ENCLOSURE TO ALLOW FOR DRAINING.
8. VAULT AND ACCESS HATCHES SHALL BE SIZED TO ALLOW ENTRY FOR INSPECTION, TESTING AND COMPLETE REPLACEMENT OF DEVICES.

WATER METER PIT ROCHESTER

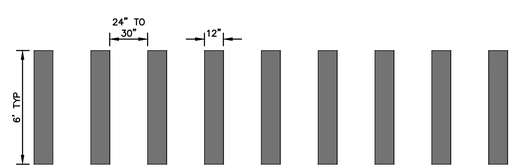
NOT TO SCALE



DETECTABLE WARNINGS SHALL CONSIST OF A SURFACE OF TRUNCATED DOMES AND SHALL COMPLY WITH THE FOLLOWING:
A. TRUNCATED DOMES SHALL HAVE A BASE DIAMETER OF 0.9" (MIN.) AND 1.4" (MAX.), A TOP DIAMETER OF 50% OF THE BASE DIAMETER MINIMUM TO 65% OF THE BASE DIAMETER MAXIMUM, AND A HEIGHT OF 0.2".
B. TRUNCATED DOMES SHALL HAVE A CENTER-TO-CENTER SPACING OF 1.6" MINIMUM AND 2.4" MAXIMUM, AND A BASE-TO-BASE SPACING OF .65" MINIMUM AND 1.5" MAXIMUM, MEASURED BETWEEN THE MOST ADJACENT DOMES ON A SQUARE GRID.
C. TRUNCATED DOMES TO BE CAST IRON PER NHDOT SPECIFICATIONS.
D. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.

TRUNCATED DOMES TO BE PLACED IN SIDEWALK BASE IN PUBLIC TRAFFIC AREAS.

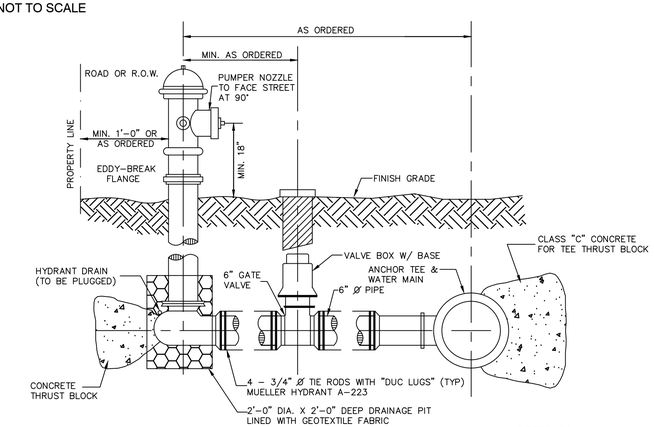
ACCESSIBLE CURB RAMP TRUNCATED DOMES



NOTES:
1. TRANSVERSE CROSSWALK LINES SHALL BE THERMOPLASTIC, NOT LESS THAN 6" WIDE AND NOT LESS THAN 6' APART.
2. SPACING FOR THE CONTINENTAL CLOCK MARKINGS SHALL BE UNIFORM FOR EACH INDIVIDUAL CROSSWALK BUT CAN BE MODIFIED FOR ONE CROSSWALK TO THE NEXT TO ELIMINATE A CROSSWALK MARKING DIRECTLY IN THE WHEELPATH.

NHDOT CONTINENTAL BLOCK MARKING DETAIL

NOT TO SCALE



NOTES
1. ALL PIPE FITTINGS TO BE D.I. PRESSURE CLASS 350, THICKNESS CLASS 52.
2. HYDRANT TO BE PAINTED RED WITH WHITE "REFLECTOR" PAINT ON BONNET.
3. MECHANICAL JOINTS SHALL HAVE MEGALUG RETAINING GLANDS AS MADE BY EBBA OR APPROVED EQUAL.
4. STEAMER NOZZLE TO BE "STORCH" TYPE.
5. NATIONAL STANDARD THREAD.
6. HYDRANTS SHALL BE NON- DRAINING, NON-ROTATING STEM EQUAL TO KENNEDY K-81-D. VALVES SHALL OPEN CLOCKWISE

REFER TO ROCHESTER WATER DEPARTMENT SPECS.

HYDRANT INSTALLATION

NOT TO SCALE

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: AS NOTED	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

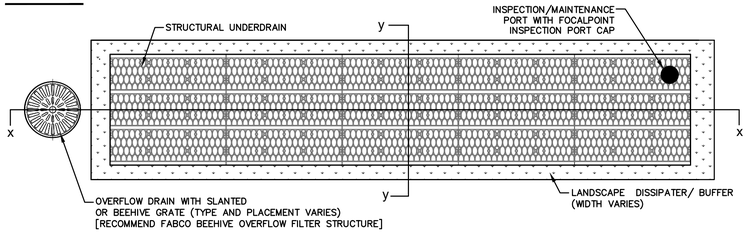
Plan Name:	DETAIL SHEET
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.

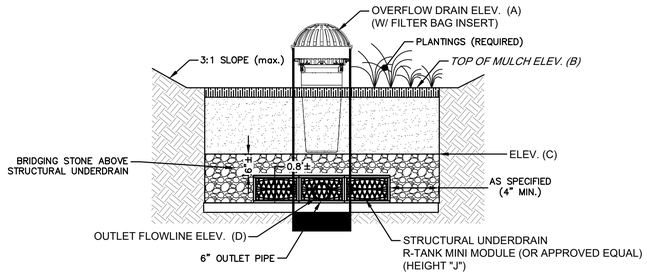
D4

SHEET 24 OF 29
JBE PROJECT NO.21137

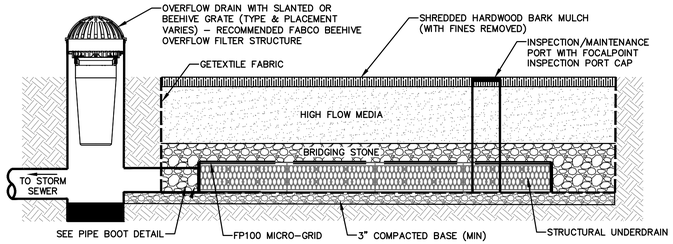
PLAN VIEW



SECTION Y-Y



SECTION X-X



FOCALPOINT BIOFILTRATION SYSTEM TYPICAL LAYOUT AND SECTIONS

NOT TO SCALE

FOCALPOINT HP PERFORMANCE SPECIFICATION:

HIGH PERFORMANCE MEDIA
HIGH PERFORMANCE MEDIA MUST MEET A MINIMUM OF 100–INCHES PER HOUR INFILTRATION RATE.
FIELD HYDRAULIC CONDUCTIVITY TESTING MUST BE CONDUCTED WITHIN 30 DAYS OF INSTALLATION.
FIELD TEST MUST BE CONDUCTED WITH PROSCRIBED INFILTROMETER AND SOP (SEE SPECIFICATIONS)
FAILURE TO MEET FIELD TESTING WILL RESULT IN THE REMOVAL OF MEDIA AND REPLACEMENT FROM ALTERNATE BATCH.

HIGH PERFORMANCE STRUCTURAL UNDERDRAIN

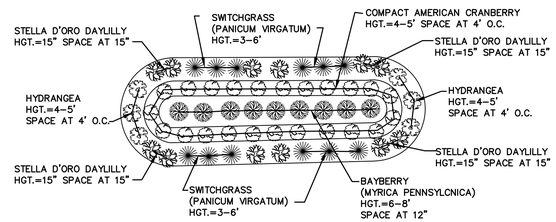
MUST HAVE A MINIMUM OF 19 SQUARE INCHES OF ORIFACE OPENING PER SQUARE FOOT.
MUST MEET H20 LOADING REQUIREMENTS
MUST BE MODULAR IN NATURE AND ASSEMBLED ON SITE.
MUST HAVE MINIMUM 90% INTERIOR VOID SPACE.

PLANT COMPONENT

SUPPLIER SHALL PROVIDE LIST OF ACCEPTABLE PLANTS
PLANTS SHALL BE INSTALLED AT THE TIME THE SYSTEM IS COMMISSIONED FOR USE. PLANTING OUTSIDE THIS TIME REQUIRES APPROVAL BY THE ENGINEER OF RECORD
SEE FOCALPOINT INSTALLATION GUIDE FOR PLANT SPACING, PLANTING PROCEDURES, ETC.

FOCALPOINT HP CONSTRUCTION GUIDE

FOCALPOINT ID	FP–1	FP–2	FP–3	FP–4
FOCALPOINT LENGTH	11'	10'	9'	8'
FOCALPOINT WIDTH	6'	6'	6'	4'
FOCALPOINT INV	225.34	225.34	222.32	189.50
TOP OF MULCH	228.34	228.34	225.32	192.50
OVERFLOW SIZE	15"	15"	12"	12"
OVERFLOW ELEVATION	228.84	228.84	225.82	193.00



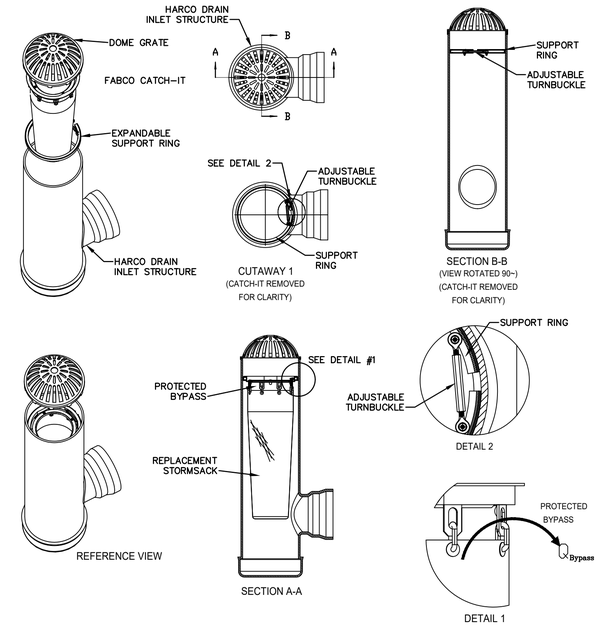
NOTES

1 NATIVE PLANTS ARE BEST SUITED AS THEY ADJUST WELL TO PERIODIC DROUGHTS AND TEMPERATURE EXTREMES. USE USDA HARDINESS ZONES AS THE FIRST GUIDE FOR PLANTS.

1. ROOT MORPHOLOGY IS IMPORTANT. SHALLOW FIBROUS ROOT SYSTEMS ARE BEST AND GENERALLY ONLY GROW TO DEPTHS OF 3 FT. PLANTS WITH TAP ROOTS OR THAT ARE SURFACE SPREADING SHOULD NOT BE USED.
2. SMALL TREES, WOODY SHRUBS OR HERBACEOUS PLANTS ARE ALL SUITABLE FOR THE SYSTEM.
3. IF THE RUNOFF COULD BE CONTAMINATED WITH ROAD SALTS, SALT TOLERANT PLANTS SHOULD BE USED.
4. GENERALLY FACULTATIVE PLANTS THAT LIKE WELL DRAINED SOILS SHOULD BE USED. DESPITE THE VOLUME OF WATER TREATED, THE SOIL DRAINS VERY WELL SO FACULTATIVE–WET OR OBLIGATE PLANTS WILL NOT DO WELL IN THESE SYSTEMS.
5. SOIL MOISTURE IS MAINTAINED THROUGH THE USE OF 10% PEAT MOSS IN THE ORIGINAL MEDIA MIX AND THE USE OF A 3 INCH LAYER OF MULCH ON THE MEDIA SURFACE. OVER THE YEARS, DUE TO ROUTINE REPLACEMENT OF THE MULCH AND ONGOING INPUT OF ORGANIC MATERIAL FROM THE RUNOFF (LEAF LITTER, ORGANICS AND DETRITUS MATERIALS), THIS LEVEL OF ORGANIC CONTENT IS MAINTAINED. THROUGH EXPERIENCE THIS HAS BEEN ADEQUATE TO HELP THE PLANTS SURVIVE EXTENDED DROUGHTS.
6. PLANT SELECTION CAN SOMETIMES BE A FUNCTION OF THE SOIL DEPTH USED FOR THE FOCALPOINT SYSTEM. FOR EXAMPLE, IF LARGE CANOPY TREES ARE REQUIRED, A SOIL DEPTH OF 5 FT. OR MORE MAY BE NEEDED TO PREVENT WIND THROW. IF THERE IS ONLY 1 FT. OF MEDIA THEN FLOWERS OR GRASSES SHOULD BE USED.
7. THE PALETTE USED IS OFTEN DICTATED BY THE LIST OF ACCEPTABLE MATERIALS IN LOCAL REGULATIONS. MOST OF THE TIME, IT IS POSSIBLE TO FIND THE PROPER PLANT FROM THAT LIST.
8. ALTERNATE PLANTINGS MUST BE OF THE TYPE APPROVED BY ACF ENVIRONMENTAL AND APPROVED BY ENGINEER OF RECORD.

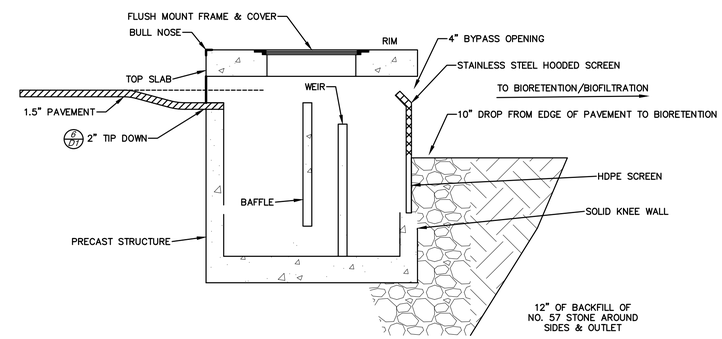
TYPICAL FOCALPOINT PLANTINGS

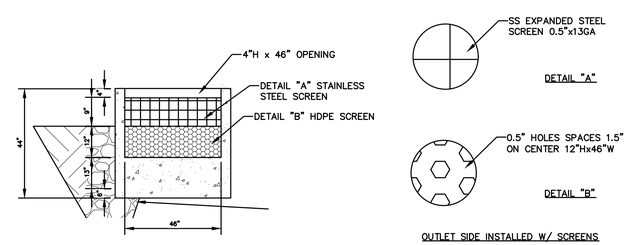
NOT TO SCALE



FABCO BEEHIVE OVERFLOW FILTER STRUCTURE DETAILS (FOCALPOINT)

NOT TO SCALE





PRETX CURB INLET PRE-TREATMENT DETAIL

NOT TO SCALE

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: AS NOTED	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

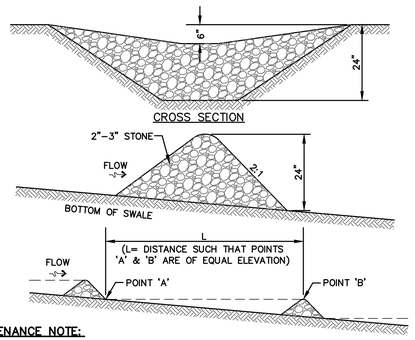
Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	DETAIL SHEET
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.

D5

SHEET 25 OF 29
JBE PROJECT NO.21137



MAINTENANCE NOTE:

1. STONE CHECK DAMS SHOULD BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY. PARTICULAR ATTENTION SHOULD BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE. WHEN THE STRUCTURES ARE REMOVED, THE DISTURBED PORTION SHOULD BE BROUGHT TO THE EXISTING CHANNEL GRADE AND THE AREAS PREPARED, SEEDED AND MULCHED. WHILE THIS PRACTICE IS NOT INTENDED TO BE USED PRIMARILY FOR SEDIMENT TRAPPING, SOME SEDIMENT WILL ACCUMULATE BEHIND THE STRUCTURES. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT HAS ACCUMULATED TO ONE HALF OF THE ORIGINAL HEIGHT OF THE STRUCTURE.

STONE CHECK DAM

NOT TO SCALE

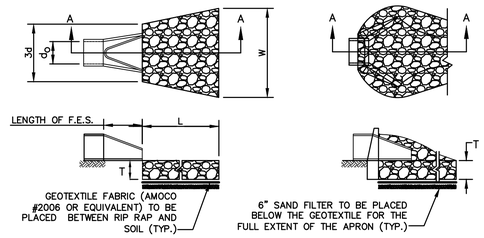


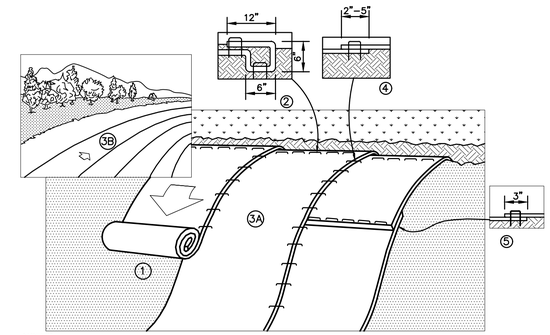
TABLE 7–24––RECOMMENDED RIP RAP GRADATION RANGES		
THICKNESS OF RIP RAP = 1.5 FEET		
d50 SIZE= 0.50 FEET 6 INCHES		
% OF WEIGHT SMALLER THAN THE GIVEN d50 SIZE	SIZE OF STONE (INCHES) FROM	TO
100%	9	12
85%	8	11
50%	6	9
15%	2	3

NOTES:

1. THE SUBGRADE FOR THE GEOTEXTILE FABRIC AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
5. OUTLETS TO A DEFINED CHANNEL SHALL HAVE 2:1 OR FLATTER SIDE SLOPES AND SHOULD BEGIN AT THE TOP OF THE CULVERT AND TAPER DOWN TO THE CHANNEL BOTTOM THROUGH THE LENGTH OF THE APRON.
6. MAINTENANCE: THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIP RAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO OUTLET PROTECTION.

RIP RAP OUTLET PROTECTION APRON

NOT TO SCALE



NOTES:

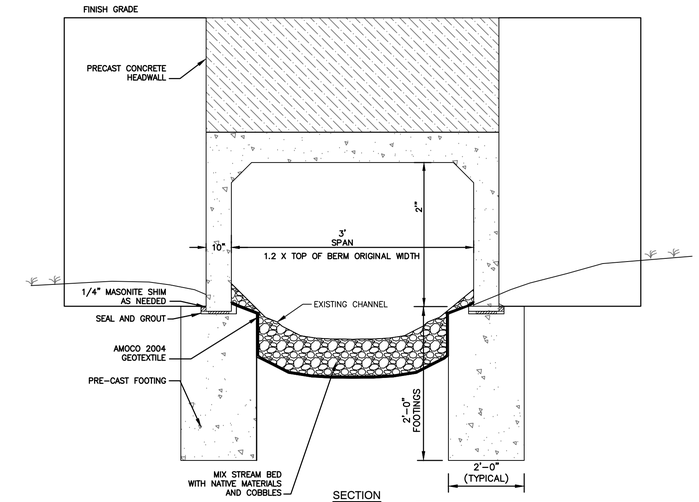
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL–O–SEED DO NOT SEED PREPARED AREA. CELL–O–SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM™, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"–5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

NORTH AMERICAN GREEN
14649 HIGHWAY 41 NORTH
EVANSVILLE, INDIANA 47725
1–800–772–2040

EROSION CONTROL BLANKET SLOPE INSTALLATION

NORTH AMERICAN GREEN (800) 772-2040

NOT TO SCALE



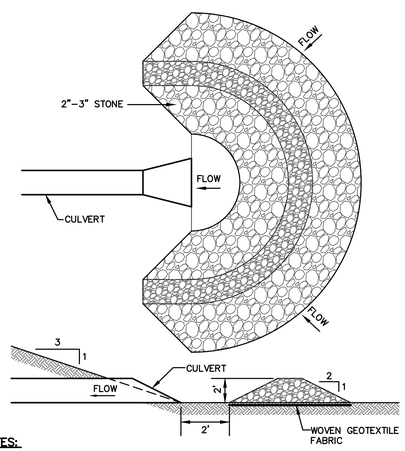
NOTES:

1. STRUCTURE TO BE DESIGNED FOR H20 LOADING.
2. THIS DETAIL IS FOR ILLUSTRATIVE PURPOSES ONLY. PRECAST CULVERT & WINGWALLS TO BE DESIGNED AND STAMPED BY A LICENSED STRUCTURAL ENGINEER.
3. SHOP DRAWINGS & DETAILS STAMPED BY A LICENSED STRUCTURAL ENGINEER SHALL BE REVIEWED & APPROVED FOR PLAN COMPLIANCE BY JONES AND BEACH ENGINEERS, INC. (JBE) PRIOR TO INSTALLATION. JBE TAKES NO LIABILITY FOR THE DESIGN OF THIS BRIDGE STRUCTURE OR ITS COMPONENTS.

TABLE–RECOMMENDED GRADATION RANGES		
THICKNESS OF COBBLES = 1.25 FEET		
d50 SIZE= 0.50 FEET 6 INCHES		
% OF WEIGHT SMALLER THAN THE GIVEN d50 SIZE	SIZE OF STONE (INCHES) FROM	TO
100%	14"	15"
85%	10"	14"
50%	4"	9"
15%	2"	3"

PRECAST RIGID FRAME BOX CULVERT W/ WINGWALLS

NOT TO SCALE

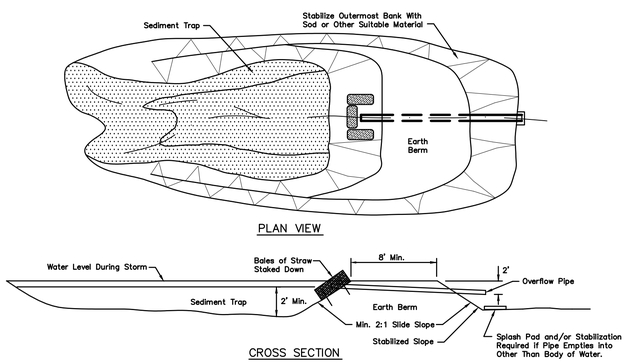


NOTES:

1. TEMPORARY CULVERT INLET PROTECTION CHECK DAMS SHALL BE CONSTRUCTED OF 2–3" STONE OVER WOVEN GEOTEXTILE FABRIC.
2. INLET PROTECTION MEASURES SHALL BE INSTALLED AT THE OPENINGS OF ALL EXISTING AND PROPOSED CULVERTS LOCATED BELOW (DOWNSTREAM) FROM AND WITHIN 100' OF THE PROJECT SITE.
3. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURE WHEN IT HAS ACCUMULATED TO ONE HALF THE ORIGINAL HEIGHT OF THE STRUCTURE.
4. STRUCTURES SHALL BE REMOVED WHEN THE SITE IS STABILIZED WITH VEGETATION AND THE CHANNEL SHALL BE SMOOTHED AND REVEGETATED.

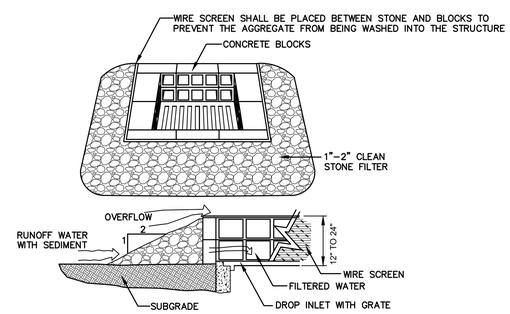
TEMPORARY CULVERT INLET PROTECTION CHECK DAM

NOT TO SCALE



TEMPORARY SEDIMENT BASIN

NOT TO SCALE

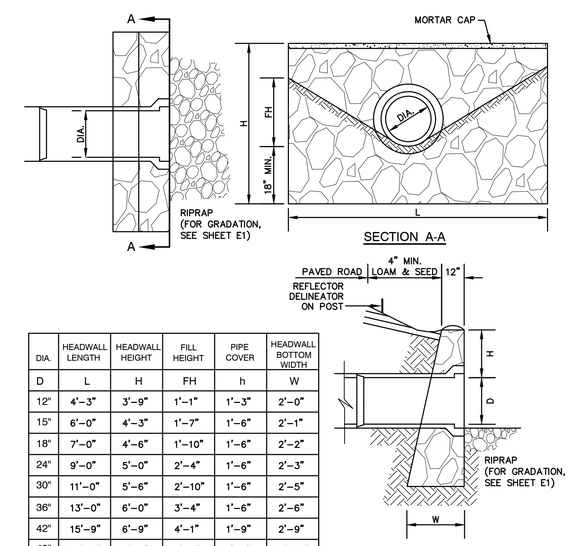


MAINTENANCE NOTE:

1. ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAINFALL AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE REMOVED FROM TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAXIMUM OF ONE HALF THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE DISPOSED IN A SUITABLE UPLAND AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURE OR VEGETATIVE MEANS. THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.

TEMPORARY CATCH BASIN INLET PROTECTION
(Block and Gravel Drop Inlet Sediment Filter)

NOT TO SCALE



DIA.	HEADWALL LENGTH	HEADWALL HEIGHT	FILL HEIGHT	PIPE COVER	HEADWALL BOTTOM WIDTH
D	L	H	FH	h	W
12"	4'–3"	3'–9"	1'–1"	1'–3"	2'–0"
15"	6'–0"	4'–3"	1'–7"	1'–6"	2'–1"
18"	7'–0"	4'–6"	1'–10"	1'–6"	2'–2"
24"	9'–0"	5'–0"	2'–4"	1'–6"	2'–3"
30"	11'–0"	5'–6"	2'–10"	1'–6"	2'–5"
36"	13'–0"	6'–0"	3'–4"	1'–6"	2'–6"
42"	15'–9"	6'–9"	4'–1"	1'–9"	2'–9"
48"	17'–9"	7'–3"	4'–7"	1'–9"	2'–10"

NOTES:

1. ALL DIMENSIONS GIVEN IN FEET AND INCHES.
2. PROVIDE BELL END AT INLET HEADWALL, AND SPIGOT END AT OUTLET END HEADWALL.
3. RIPRAP SHALL BE SIZED TO RESIST THE TRACTIVE VELOCITY FORCES.

MORTAR RUBBLE MASONRY HEADWALL

NOT TO SCALE

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: AS NOTED	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

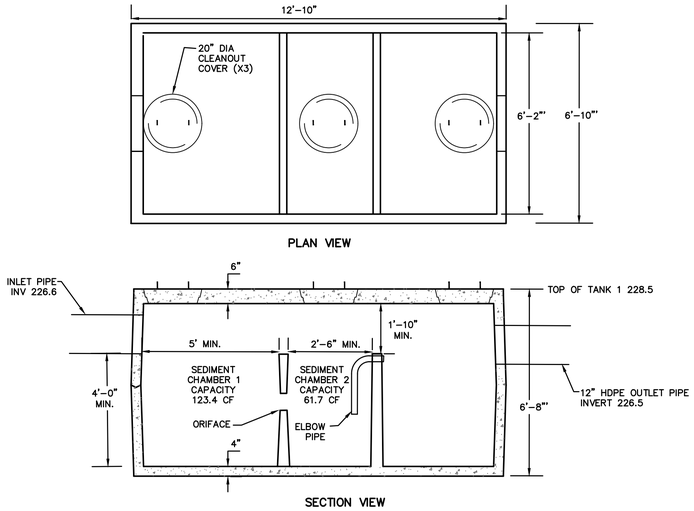
Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: DETAIL SHEET

Project: WADLEIGH ROAD APARTMENTS ROCHESTER, NH

Owner of Record: SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
D6



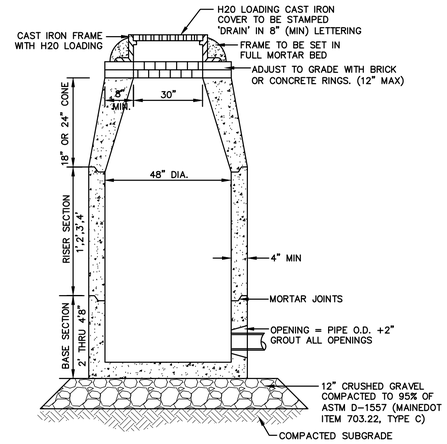
REQUIRED CAPACITY FIRST AND SECOND CHAMBERS
0.40 AC IMPERVIOUS ROOF AREA X 400 CF/ACRE = 160 CF REQUIRED
185 CF PROVIDED

NOTES:

1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. DESIGN CONFORMS WITH 310 CMR 15.00, DEP TITLE 5 REGS, FOR SEPTIC TANKS.
3. ALL REINFORCEMENT PER ASTM C1227-93.
4. TEES AND GAS BAFFLE SOLD SEPARATELY.
5. TONGUE & GROOVE JOINT SEALED WITH BUTYLE RESIN.
6. H-20 LOADING.

WATER QUALITY INLET

NOT TO SCALE

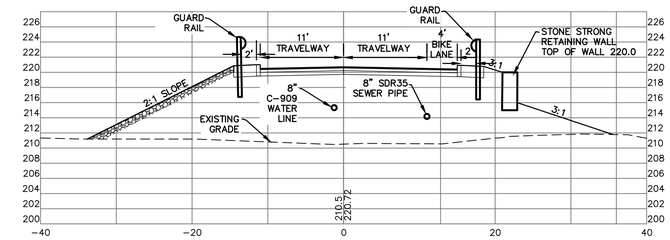


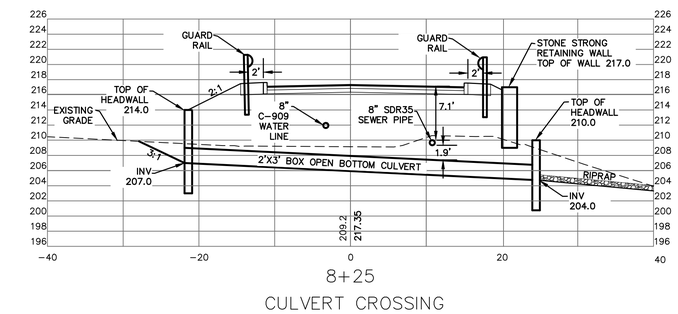
NOTES:

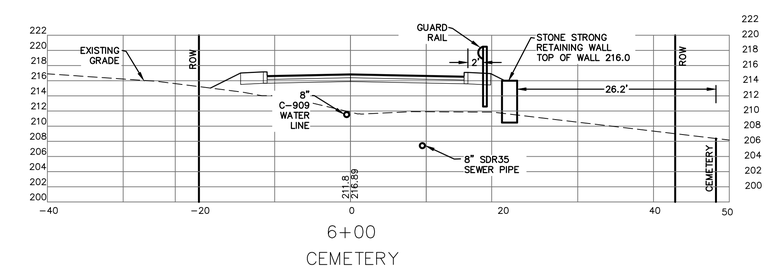
1. BASE SECTION SHALL BE MONOLITHIC WITH 48" INSIDE DIAMETER.
2. ALL SECTIONS SHALL BE DESIGNED FOR H20 LOADING.
3. CONCRETE SHALL BE COMPRESSIVE STRENGTH 4000 PSI, TYPE II CEMENT.
4. FRAMES AND GRATES SHALL BE HEAVY DUTY AND DESIGNED FOR H20 LOADING.
5. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS SO AS TO BE WATERTIGHT.
6. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RUBBER.
7. ALL DRAIN MANHOLE FRAMES AND GRATES SHALL BE NEENAH R-1798 OR APPROVED EQUAL (30" DIA. TYPICAL).
8. STANDARD FRAME(S) AND GRATE(S) SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM, BUT NO MORE THAN 12"), OR PRECAST CONCRETE 'DONUTS'.

DRAIN MANHOLE (4' DIAM.)

NOT TO SCALE

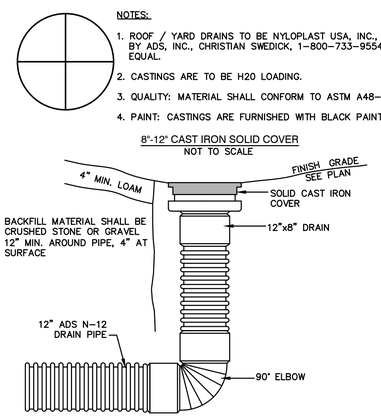






SELECT CROSS SECTIONS

SCALE: 1"=10'



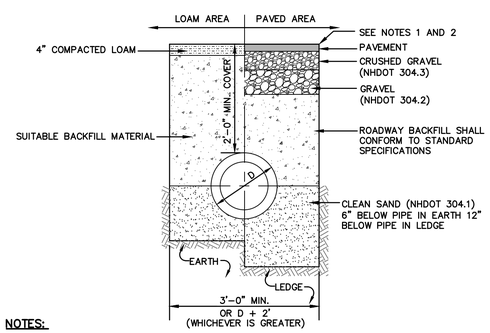
NOTES:

1. ROOF / YARD DRAINS TO BE NYLOPLAST USA, INC., AND SUPPLIED BY ADS, INC., CHRISTIAN SWEDICK, 1-800-733-9554 OR APPROVED EQUAL.
2. CASTINGS ARE TO BE H20 LOADING.
3. QUALITY: MATERIAL SHALL CONFORM TO ASTM A48-CLASS 30B.
4. PAINT: CASTINGS ARE FURNISHED WITH BLACK PAINT.

8"-12" CAST IRON SOLID COVER
NOT TO SCALE

ADS N-12 YARD DRAIN

NOT TO SCALE



NOTES:

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
2. NEW ROADWAY CONSTRUCTION SHALL CONFORM WITH PROJECT AND TOWN SPECIFICATIONS.
3. ALL MATERIALS ARE TO BE COMPACTED TO 95% OF ASTM D-1557.

DRAINAGE TRENCH

NOT TO SCALE

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: AS NOTED	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	DETAIL SHEET CROSS SECTIONS
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

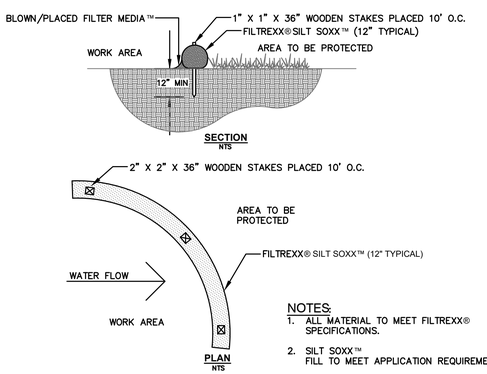
DRAWING No.

D7

SHEET 27 OF 29
JBE PROJECT NO.21137

TEMPORARY EROSION CONTROL NOTES

1. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME. AT NO TIME SHALL AN AREA IN EXCESS OF 5 ACRES BE EXPOSED AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
2. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED, DIRECTED BY THE ENGINEER.
3. ALL DISTURBED AREAS (INCLUDING POND AREAS BELOW THE PROPOSED WATERLINE) SHALL BE RETURNED TO PROPOSED GRADES AND ELEVATIONS. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 6" OF SCREENED ORGANIC LOAM AND SEEDED WITH SEED MIXTURE 'C' AT A RATE NOT LESS THAN 1.10 POUNDS OF SEED PER 1,000 S.F. OF AREA (48 LBS. / ACRE).
4. SILT FENCES AND OTHER BARRIERS SHALL BE INSPECTED EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 0.5" OR GREATER. ALL DAMAGED AREAS SHALL BE REPAIRED, AND SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.
5. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.
6. AREAS MUST BE SEEDED AND MULCHED OR OTHERWISE PERMANENTLY STABILIZED WITHIN 3 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 14 DAYS OF THE INITIAL DISTURBANCE OF SOIL. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE. TEMPORARY STABILIZATION MEASURES SHOULD BE IN PLACE WITHIN 5 CALENDAR DAYS FOR EXPOSED SOIL AREAS THAT ARE WITHIN 100-FEET OF A SURFACE WATER BODY OR A WETLAND.
7. IN AREAS WHERE FINAL GRADING HAS NOT OCCURRED, TEMPORARY STABILIZATION MEASURES SHOULD BE IN PLACE WITHIN 5 CALENDAR DAYS FOR EXPOSED SOIL AREAS THAT ARE WITHIN 100 FEET OF A SURFACE WATERBODY OR A WETLAND AND NO MORE THAN 14 CALENDAR DAYS FOR ALL OTHER AREAS. PERMANENT STABILIZATION SHOULD BE IN PLACE WITHIN 3 CALENDAR DAYS FOLLOWING COMPLETION OF FINAL GRADING OF EXPOSED SOIL AREAS.
8. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED BETWEEN OCTOBER 15 AND MAY 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING NORTH AMERICAN GREEN SC150BN EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER) ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
9. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
10. AFTER OCTOBER 15th AND BEFORE MAY 15th, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3" OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.
11. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
    a. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
    b. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
    c. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED; OR
    d. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
11. FUGITIVE DUST CONTROL IS REQUIRED TO BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000, AND THE PROJECT IS TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
12. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR'S NAME, ADDRESS, AND PHONE NUMBER SHALL BE SUBMITTED TO DES VIA EMAIL (SEE BELOW).
13. PRIOR TO CONSTRUCTION, A PHASING PLAN THAT DELINEATES EACH PHASE OF THE PROJECT SHALL BE SUBMITTED. ALL TEMPORARY SEDIMENT BASINS THAT WILL BE NEEDED FOR DEWATERING WORK AREAS SHALL BE LOCATED AND IDENTIFIED ON THIS PLAN.
14. IN ORDER TO ENSURE THE STABILITY OF THE SITE AND EFFECTIVE IMPLEMENTATION OF THE SEDIMENT AND EROSION CONTROL MEASURES SPECIFIED IN THE PLANS FOR THE DURATION OF CONSTRUCTION, THE CONTRACTOR SHALL BE IN STRICT COMPLIANCE WITH THE FOLLOWING INSPECTION AND MAINTENANCE REQUIREMENTS IN ADDITION TO THOSE CALLED FOR IN THE SWPPP:
    a. A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL OR A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE ("MONITOR") SHALL BE EMPLOYED TO INSPECT THE SITE FROM THE START OF ALTERATION OF TERRAIN ACTIVITIES UNTIL THE SITE IS IN FULL COMPLIANCE WITH THE SITE SPECIFIC PERMIT ("PERMIT").
    b. DURING THIS PERIOD, THE MONITOR SHALL INSPECT THE SUBJECT SITE AT LEAST ONCE A WEEK, AND IF POSSIBLE, DURING ANY ½ INCH OR GREATER RAIN EVENT (I.E. ½ INCH OF PRECIPITATION OR MORE WITHIN A 24 HOUR PERIOD). IF UNABLE TO BE PRESENT DURING SUCH A STORM, THE MONITOR SHALL INSPECT THE SITE WITHIN 24 HOURS OF THIS EVENT.
    c. THE MONITOR SHALL PROVIDE TECHNICAL ASSISTANCE AND RECOMMENDATIONS TO THE CONTRACTOR ON THE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS REQUIRED TO MEET THE REQUIREMENTS OF RSA 485 A:17 AND ALL APPLICABLE DES PERMIT CONDITIONS.
    d. WITHIN 24 HOURS OF EACH INSPECTION, THE MONITOR SHALL SUBMIT A REPORT TO DES VIA EMAIL (RIDGELY MAUCK AT: RIDGELY.MAUCK@DES.NH.GOV).
    e. THE MONITOR SHALL MEET WITH DES TO DECIDE UPON A REPORT FORMAT. THE REPORT FORMAT SHALL BE REVIEWED AND APPROVED BY DES PRIOR TO THE START OF CONSTRUCTION.



NOTES:
1. ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS.
2. SILT SOXX™ FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

FILTREXX® SILT SOXX™

NOT TO SCALE

BLASTING SPECIFICATIONS

A. BEST MANAGEMENT PRACTICES FOR BLASTING, ALL ACTIVITIES RELATED TO BLASTING SHALL FOLLOW BEST MANAGEMENT PRACTICES (BMPS) TO PREVENT CONTAMINATION OF GROUNDWATER INCLUDING PREPARING, REVIEWING AND FOLLOWING AN APPROVED BLASTING PLAN; PROPER DRILLING, EXPLOSIVE HANDING AND LOADING PROCEDURES; OBSERVING THE ENTIRE BLASTING PROCEDURES; EVALUATING BLASTING PERFORMANCE; AND HANDLING AND STORAGE OF BLASTED ROCK.

(1) LOADING PRACTICES. THE FOLLOWING BLASTHOLE LOADING PRACTICES TO MINIMIZE ENVIRONMENTAL EFFECTS SHALL BE FOLLOWED:
- (a) DRILLING LOGS SHALL BE MAINTAINED BY THE DRILLER AND COMMUNICATED DIRECTLY TO THE BLASTER. THE LOGS SHALL INDICATE DEPTHS AND LENGTHS OF VOIDS, CAVITIES, AND FAULT ZONES OR OTHER WEAK ZONES ENCOUNTERED AS WELL AS GROUNDWATER CONDITIONS.
- (b) EXPLOSIVE PRODUCTS SHALL BE MANAGED ON-SITE SO THAT THEY ARE EITHER USED IN THE BOREHOLE, RETURNED TO THE DELIVERY VEHICLE, OR PLACED IN SECURE CONTAINERS FOR OFF- SITE DISPOSAL.
- (c) SPILLAGE AROUND THE BOREHOLE SHALL EITHER BE PLACED IN THE BOREHOLE OR CLEANED UP AND RETURNED TO AN APPROPRIATE VEHICLE FOR HANDLING OR PLACEMENT IN SECURED CONTAINERS FOR OFF-SITE DISPOSAL.
- (d) LOADED EXPLOSIVES SHALL BE DETONATED AS SOON AS POSSIBLE AND SHALL NOT BE LEFT IN THE BLASTHOLES OVERNIGHT, UNLESS WEATHER OR OTHER SAFETY CONCERNS REASONABLY DICTATE THAT DETONATION SHOULD BE POSTPONED.
- (e) LOADING EQUIPMENT SHALL BE CLEANED IN AN AREA WHERE WASTEWATER CAN BE PROPERLY CONTAINED AND HANDLED IN A MANNER THAT PREVENTS RELEASE OF CONTAMINANTS TO THE ENVIRONMENT.
- (f) EXPLOSIVES SHALL BE LOADED TO MAINTAIN GOOD CONTINUITY IN THE COLUMN LOAD TO PROMOTE COMPLETE DETONATION. INDUSTRY ACCEPTED LOADING PRACTICES FOR PRIMING, STEMMING, DECKING AND COLUMN RISE NEED TO BE ATTENDED TO.

(2) EXPLOSIVE SELECTION. THE FOLLOWING BMPS SHALL BE FOLLOWED TO REDUCE THE POTENTIAL FOR GROUNDWATER CONTAMINATION WHEN EXPLOSIVES ARE USED:
- (a) EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT ARE APPROPRIATE FOR SITE CONDITIONS AND SAFE BLAST EXECUTION.
- (b) EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT HAVE THE APPROPRIATE WATER RESISTANCE FOR THE SITE CONDITIONS PRESENT TO MINIMIZE THE POTENTIAL FOR HAZARDOUS EFFECT OF THE PRODUCT UPON GROUNDWATER.

(3) PREVENTION OF MISFIRES, APPROPRIATE PRACTICES SHALL BE DEVELOPED AND IMPLEMENTED TO PREVENT MISFIRES.

(4) MUCK PILE MANAGEMENT. MUCK PILES (THE BLASTED PIECES OF ROCK) AND ROCK PILES SHALL BE MANAGED IN A MANNER TO REDUCE THE POTENTIAL FOR CONTAMINATION BY IMPLEMENTING THE FOLLOWING MEASURES:
- (a) REMOVE THE MUCK PILE FROM THE BLAST AREA AS SOON AS REASONABLY POSSIBLE.
- (b) MANAGE THE INTERACTION OF BLASTED ROCK PILES AND STORMWATER TO PREVENT CONTAMINATION OF WATER SUPPLY WELLS OR SURFACE WATER.

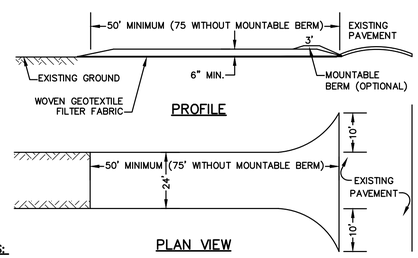
(5) SPILL PREVENTION MEASURES AND SPILL MITIGATION. SPILL PREVENTION AND SPILL MITIGATION MEASURES SHALL BE IMPLEMENTED TO PREVENT THE RELEASE OF FUEL AND OTHER RELATED SUBSTANCES TO THE ENVIRONMENT. THE MEASURES SHALL INCLUDE AT A MINIMUM:

a. THE FUEL STORAGE REQUIREMENTS SHALL INCLUDE:
1. STORAGE OF REGULATED SUBSTANCES ON AN IMPERVIOUS SURFACE.
2. SECURE STORAGE AREAS AGAINST UNAUTHORIZED ENTRY.
3. LABEL REGULATED CONTAINERS CLEARLY AND VISIBLY.
4. INSPECT STORAGE AREAS WEEKLY.
5. COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS.
6. WHEREVER POSSIBLE, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE MORE THAN 50 FEET FROM SURFACE WATER AND STORM DRAINS, 75 FEET FROM PRIVATE WELLS, AND 400 FEET FROM PUBLIC WELLS.
7. SECONDARY CONTAINMENT IS REQUIRED FOR CONTAINERS CONTAINING REGULATED SUBSTANCES STORED OUTSIDE, EXCEPT FOR ON PREMISE USE HEATING FUEL TANKS, OR ABOVEGROUND OR UNDERGROUND STORAGE TANKS OTHERWISE REGULATED.

b. THE FUEL HANDLING REQUIREMENTS SHALL INCLUDE:
1. EXCEPT WHEN IN USE, KEEP CONTAINERS CONTAINING REGULATED SUBSTANCES CLOSED AND SEALED.
2. PLACE DRIP PANS UNDER SPIGOTS, VALVES, AND PUMPS.
3. HAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT READILY AVAILABLE IN ALL WORK AREAS.
4. USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES.
5. PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS SURFACE.

c. THE TRAINING OF ON-SITE EMPLOYEES AND THE ON-SITE POSTING OF RELEASE RESPONSE INFORMATION DESCRIBING WHAT TO DO IN THE EVENT OF A SPILL OF REGULATED SUBSTANCES.

d. FUELING AND MAINTENANCE OF EXCAVATION, EARTHMOVING AND OTHER CONSTRUCTION RELATED EQUIPMENT WILL COMPLY WITH THE REGULATIONS OF NHDES [NOTE THESE REQUIREMENTS ARE SUMMARIZED IN WD-DWGB-22-6: "BEST MANAGEMENT PRACTICES FOR FUELING AND MAINTENANCE OF EXCAVATION AND EARTHMOVING EQUIPMENT" OR ITS SUCCESSOR DOCUMENT.



NOTES:
1. STONE FOR STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, 75' WITHOUT A MOUNTABLE BERM, AND EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS, OR 10 FEET, WHICHEVER IS GREATER.
5. GEOTEXTILE FILTER FABRIC SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER FABRIC IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENTIAL LOT.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A STONE BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO THE PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

SEEDING SPECIFICATIONS

1. GRADING AND SHAPING
   - A. SLOPES SHALL NOT BE STEEPER THAN 2:1 WITHOUT APPROPRIATE EROSION CONTROL MEASURES AS SPECIFIED ON THE PLANS (3:1 SLOPES OR FLATTER ARE PREFERRED).
   - B. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
2. SEEDBED PREPARATION
   - A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
   - B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND FERTILIZER AND LIME MIXED INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
3. ESTABLISHING A STAND
   - A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. TYPES AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
     AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100 LBS. PER 1,000 SQ.FT.
     NITROGEN(N), 50 LBS. PER ACRE OR 1.1 LBS. PER 1,000 SQ.FT.
     PHOSPHATE(P2O5), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ.FT.
     POTASH(K2O), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ.FT.
     (NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF 5-10-10.)
   - B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
   - C. REFER TO THE 'SEEDING GUIDE' AND 'SEEDING RATES' TABLES ON THIS SHEET FOR APPROPRIATE SEED MIXTURES AND RATES OF SEEDING. ALL LEGUMES (CROWNVETCH, BIRDSFOOT, TREFOIL AND FLATPEA) MUST BE INOCULATED WITH THEIR SPECIFIC INOCULANT PRIOR TO THEIR INTRODUCTION TO THE SITE.
   - D. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20th OR FROM AUGUST 10th TO SEPTEMBER 1st.
4. MULCH
   - A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
   - B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING. HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 90 LBS PER 1000 S.F.
5. MAINTENANCE TO ESTABLISH A STAND
   - A. PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
   - B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME FULLY ESTABLISHED.
   - C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, ANNUAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	POOR	GOOD	EXCELLENT	GOOD
	D	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	A	GOOD	GOOD	GOOD	FAIR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	E	FAIR	EXCELLENT	EXCELLENT	2/
	F	FAIR	EXCELLENT	EXCELLENT	2/

GRAVEL PIT, SEE NH-PM-24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS.

1/ REFER TO SEEDING MIXTURES AND RATES IN TABLE BELOW.
2/ POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.

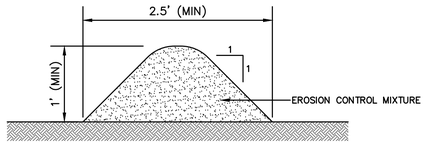
NOTE: TEMPORARY SEED MIX FOR STABILIZATION OF TURF SHALL BE WINTER RYE OR OATS AT A RATE OF 2.5 LBS. PER 1000 S.F. AND SHALL BE PLACED PRIOR TO OCTOBER 15th, IF PERMANENT SEEDING NOT YET COMPLETE.

SEEDING GUIDE

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 Sq. Ft.
A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREEPING RED FESCUE	10	0.25
CROWN VETCH	15	0.35
OR		
FLAT PEA	30	0.75
TOTAL	40 OR 55	0.95 OR 1.35
* C. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDS FOOT TREFOIL	8	0.20
TOTAL	48	1.10
D. TALL FESCUE	20	0.45
FLAT PEA	30	0.75
TOTAL	50	1.20
E. CREEPING RED FESCUE 1/	50	1.15
KENTUCKY BLUEGRASS 1/	50	1.15
TOTAL	100	2.30
F. TALL FESCUE 1	150	3.60

1/ FOR HEAVY USE ATHLETIC FIELDS CONSULT THE UNIVERSITY OF NEW HAMPSHIRE COOPERATIVE EXTENSION TURF SPECIALIST FOR CURRENT VARIETIES AND SEEDING RATES.

SEEDING RATES



NOTES:
1. ORGANIC FILTER BERMS MAY BE UTILIZED IN LIEU OF SILT FENCE, UNLESS OTHERWISE SPECIFIED.
2. THE EROSION CONTROL MIX USED IN THE FILTER BERMS SHALL BE A WELL-GRADED MIXTURE OF PARTICLE SIZES, MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER, STUMP GRINDINGS, SHREDDED OR COMPOSTED BARK, OR ACCEPTABEL MANUFACTURED PRODUCTS, AND SHALL BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH, AND SHALL MEET THE FOLLOWING STANDARDS:
   a) THE ORGANIC CONTENT SHALL BE 80-100% OF DRY WEIGHT.
   b) PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN, AND 70-85% PASSING A 0.75" SCREEN.
   c) THE ORGANIC PORTION SHALL BE FIBROUS AND ELONGATED.
   d) LARGE PORTIONS OF SILTS, CLAYS, OR FINE SANDS SHALL NOT BE INCLUDED IN THE MIXTURE.
   e) SOLUBLE SALTS CONTENT SHALL BE >4.0mmhos/cm.
   f) THE pH SHALL BE BETWEEN 5.0 AND 8.0.
3. ORGANIC FILTER BERMS SHALL BE INSTALLED ALONG A RELATIVELY LEVEL CONTOUR. IT MAY BE NECESSARY TO CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES THAT WOULD ENABLE FINES TO WASH UNDER THE BERM.
4. ON SLOPES LESS THAN 5%, OR AT THE BOTTOM OF SLOPES STEEPER THAN 3:1, UP TO 20' LONG, THE BERM SHALL BE A MINIMUM OF 12" HIGH (AS MEASURED ON THE UPHILL SIDE), AND A MINIMUM OF 36" WIDE. ON LONGER OR STEEPER SLOPES, THE BERM SHALL BE WIDER TO ACCOMMODATE THE POTENTIAL ADDITIONAL RUNOFF.
5. FROZEN GROUND, OUTCROPS OF BEDROCK, AND VERY ROOTED FORESTED AREAS PRESENT THE MOST PRACTICAL AND EFFECTIVE LOCATIONS FOR ORGANIC FILTER BERMS. OTHER BMP'S SHOULD BE USED AT LOW POINTS OF CONCENTRATED RUNOFF, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS, AND AT THE BOTTOM OF STEEP PERIMETER SLOPES THAT HAVE A LARGE CONTRIBUTING AREA.
6. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT HAS ACCUMULATED TO ONE HALF THE ORIGINAL HEIGHT OF THE STRUCTURE.
7. STRUCTURES MAY BE LEFT IN PLACE ONCE THE SITE IS STABILIZED.

ORGANIC FILTER BERM

NOT TO SCALE

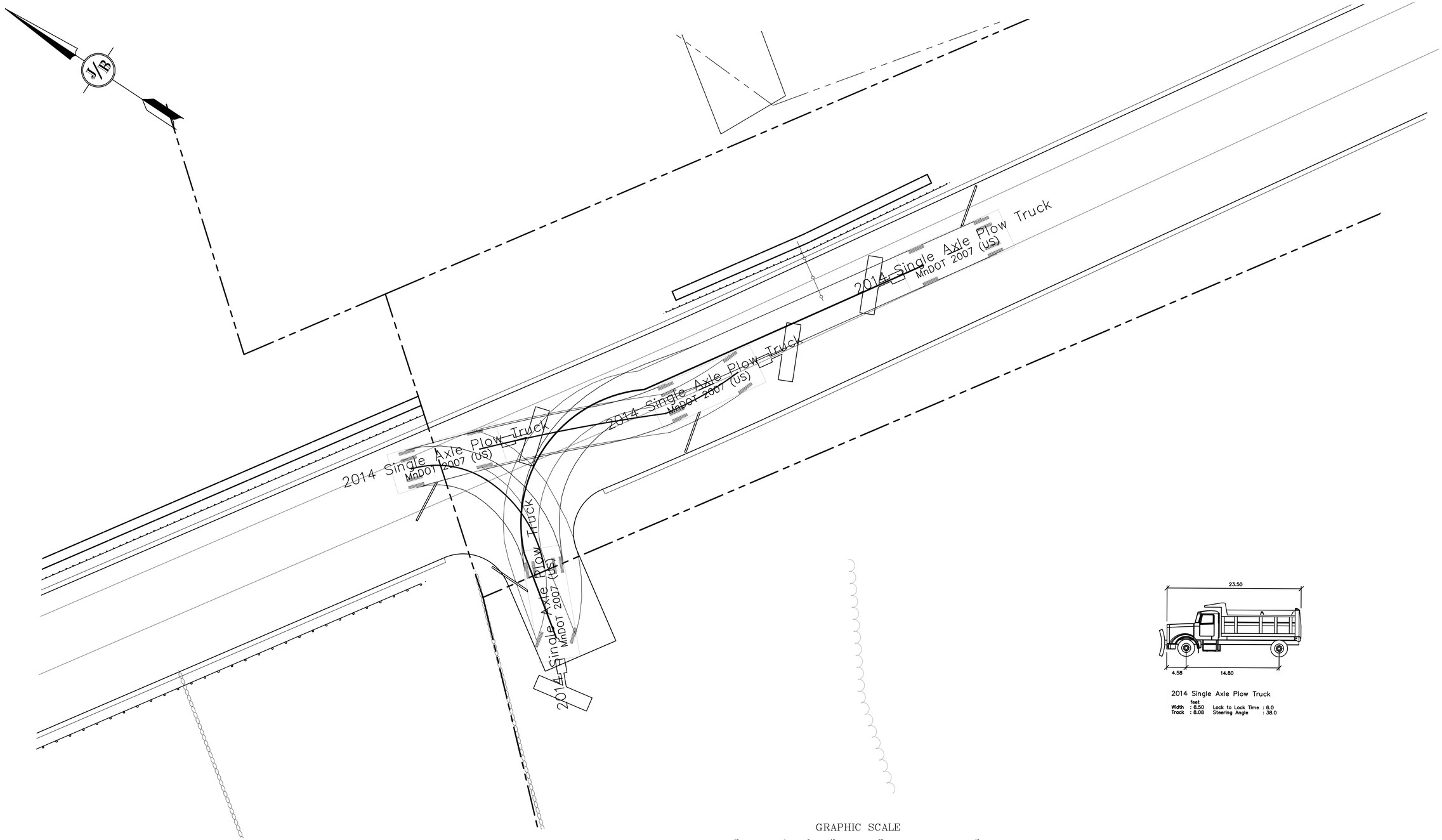
CONSTRUCTION SEQUENCE

1. PRIOR TO THE START OF ANY ACTIVITY, IT IS THE RESPONSIBILITY OF THE SITE'S SITE DEVELOPER (OR OWNER) TO FILE A NOTICE OF INTENT (NOI) FORM WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) IN ORDER TO GAIN COVERAGE UNDER THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES. A PRE CONSTRUCTION MEETING IS TO BE HELD WITH ALL DEPARTMENT HEADS PRIOR TO THE START OF CONSTRUCTION.
2. WETLAND BOUNDARIES ARE TO BE CLEARLY MARKED PRIOR TO THE START OF CONSTRUCTION. AT LEAST A TEMPORARY CULVERT OR ROADBED TO BE IN PLACE PRIOR TO THE START OF CONSTRUCTION.
3. CUT AND REMOVE TREES IN CONSTRUCTION AREA AS REQUIRED OR DIRECTED.
4. INSTALL SILT FENCING, HAY BALES AND CONSTRUCTION ENTRANCES PRIOR TO THE START OF CONSTRUCTION. THESE ARE TO BE MAINTAINED UNTIL THE FINAL PAVEMENT SURFACING AND LANDSCAPING AREAS ARE ESTABLISHED.
5. CLEAR, CUT, GRUB AND DISPOSE OF DEBRIS IN APPROVED FACILITIES. THIS INCLUDES ANY REQUIRED DEMOLITION OF EXISTING STRUCTURES, UTILITIES, ETC.
6. CONSTRUCT AND/OR INSTALL TEMPORARY OR PERMANENT SEDIMENT AND/OR DETENTION BASIN(S) AS REQUIRED. THESE FACILITIES SHALL BE INSTALLED AND STABILIZED PRIOR TO DIRECTING RUN-OFF TO THEM.
7. STRIP LOAM AND PAVEMENT, OR RECLAIM EXISTING PAVEMENT WITHIN LIMITS OF WORK PER THE RECOMMENDATIONS OF THE PROJECT ENGINEER AND STOCKPILE EXCESS MATERIAL. STABILIZE STOCKPILE AS NECESSARY.
8. PERFORM PRELIMINARY SITE GRADING IN ACCORDANCE WITH THE PLANS, INCLUDING THE CONSTRUCTION OF ANY RETAINING WALLS AND SOUND WALLS.
9. PREPARE BUILDING PAD(S) TO ENABLE BUILDING CONSTRUCTION TO BEGIN.
10. INSTALL THE SEWER AND DRAINAGE SYSTEMS FIRST, THEN ANY OTHER UTILITIES IN ACCORDANCE WITH THE PLAN AND DETAILS. ANY CONFLICTS BETWEEN UTILITIES ARE TO BE RESOLVED WITH THE INVOLVEMENT AND APPROVAL OF THE ENGINEER.
11. INSTALL INLET PROTECTION AT ALL CATCH BASINS AS THEY ARE CONSTRUCTED IN ACCORDANCE WITH DETAILS.
12. ALL SWALES AND DRAINAGE STRUCTURES ARE TO BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUN-OFF DIRECTED TO THEM.
13. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINAGE DITCHES, CHECK DAMS, SEDIMENT TRAPS, ETC., TO PREVENT EROSION ON THE SITE AND PREVENT ANY SILTATION OF ABUTTING WATERS AND/OR PROPERTY.
14. PERFORM FINAL FINE GRADING, INCLUDING PLACEMENT OF 'SELECT' SUBGRADE MATERIALS.
15. PAVE ALL PARKING LOTS AND ROADWAYS WITH INITIAL 'BASE COURSE'.
16. PERFORM ALL REMAINING SITE CONSTRUCTION (i.e. BUILDING, CURBING, UTILITY CONNECTIONS, ETC.).
17. LOAM AND SEED ALL DISTURBED AREAS AND INSTALL ANY REQUIRED SEDIMENT AND EROSION CONTROL FACILITIES (i.e. RIP RAP, EROSION CONTROL BLANKETS, ETC.).
18. FINISH PAVING ALL ROADWAYS AND PARKING AREAS WITH 'FINISH' COURSE.
19. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
20. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
21. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
22. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE BEEN 75%-85% ESTABLISHED AND SITE IMPROVEMENTS ARE COMPLETE. SMOOTH AND RE-VEGETATE ALL DISTURBED AREAS.
23. CLEAN SITE AND ALL DRAINAGE STRUCTURES, PIPES AND SUMPS OF ALL SILT AND DEBRIS.
24. INSTALL ALL PAINTED PAVEMENT MARKINGS AND SIGNAGE PER THE PLANS AND DETAILS.
25. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF-INCH OF RAINFALL.
26. UPON COMPLETION OF CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ANY RELEVANT PERMITTING AGENCIES THAT THE CONSTRUCTION HAS BEEN FINISHED IN A SATISFACTORY MANNER.

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: AS NOTED	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24



Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.:21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/1/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

Designed and Produced in NH
J/B Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	TRUCK TURNING PLAN
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.

T1

SHEET 29 OF 29
JBE PROJECT NO. 21137

VIEW FROM PARKING LOT

RIVERSIDE PATIO

THE RAPIDS AT COCHECO

WADLEIGH ROAD
ROCHESTER, NH

FOR: ELM GROVE COMPANIES

HOOKSETT,NH

BY: BURNELL △ JOHNSON

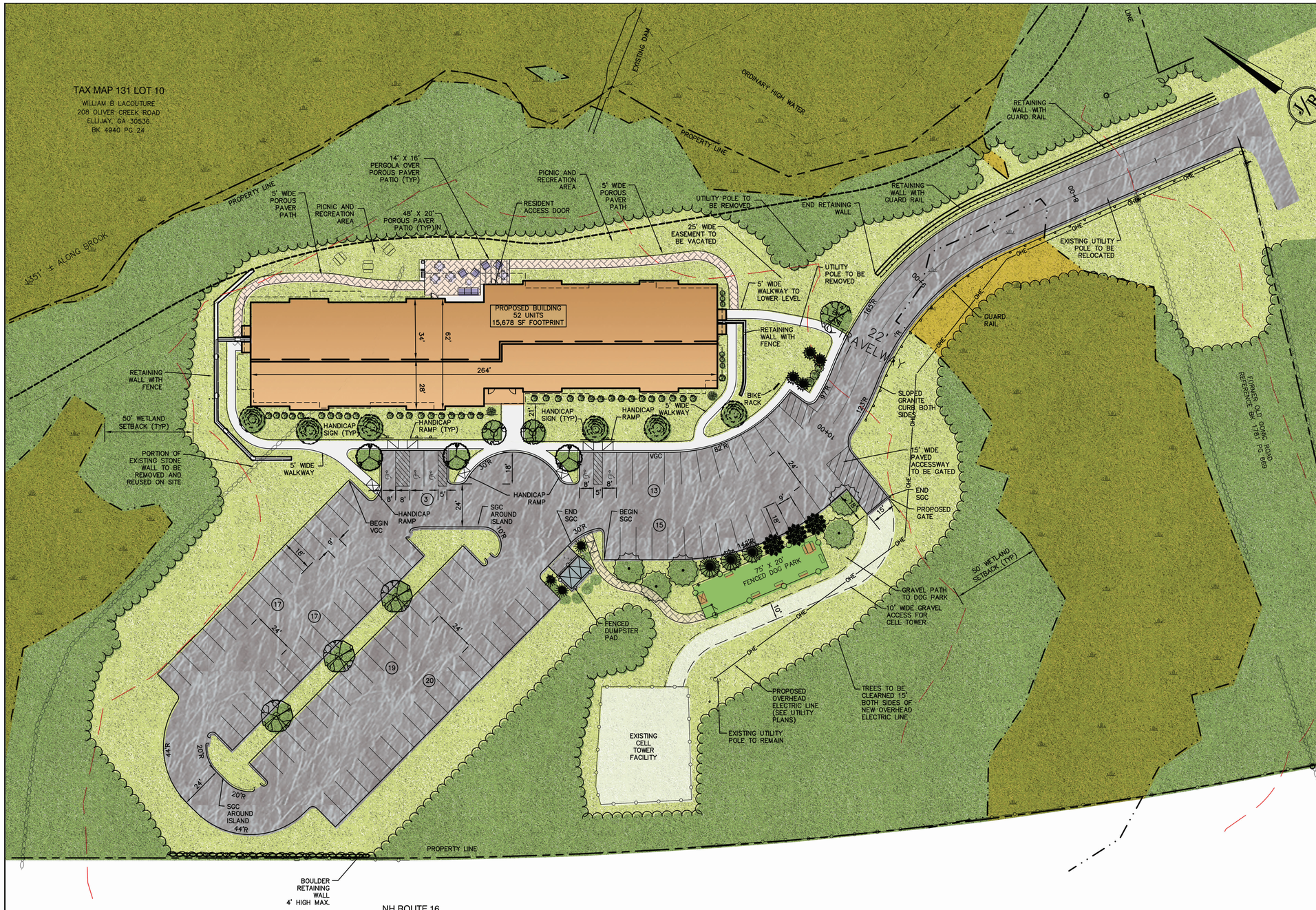
ARCHITECTS

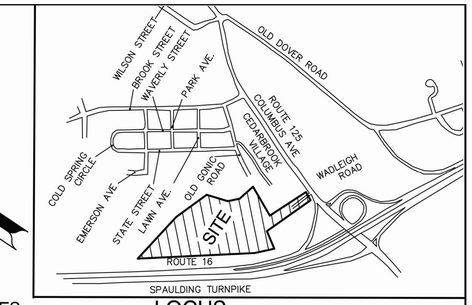
633 MAPLE STREET
HOPKINTON, NH

JAN 28, 2024

603 625 5098

COPYRIGHT BURNELL JOHNSON ARCHITECTS PLLC 2024





LOCUS SCALE: 1"=1000'

SITE NOTES:

1. THE INTENT OF THIS PLAN IS TO SHOW A LAYOUT FOR A FIFTY–TWO (52) UNIT APARTMENT COMPLEX ON TAX MAP 137, LOT 35–1. ACCESS FOR THE SITE WILL BE FROM WADLEIGH ROAD. PROJECT TO BE SERVED BY ELECTRIC, MUNICIPAL SEWER & PUBLIC WATER.

2. ZONING DISTRICT: HIGHWAY COMMERCIAL
   LOT AREA MINIMUM = 20,000 SF
   LOT FRONTAGE MINIMUM = 100'
   LOT AREA PER DWELLING UNIT = 7,500 SF
   BUILDING SETBACKS
   - FRONT SETBACK = 20'
   - SIDE SETBACK = 10'
   - REAR SETBACK = 25'
   - WETLAND SETBACK = 50

   PAVEMENT SETBACKS
   - FRONT SETBACK = 10'
   - SIDE SETBACK = 5'
   - REAR SETBACK = 10'

   MAX. LOT COVERAGE = 85%

3. PARKING CALCULATIONS:
   TOTAL NUMBER OF UNITS = 52.
   2 SPACES PER UNIT = 104 SPACES REQUIRED
   SPACES PROVIDED = 104 SPACES (INCLUDING 5 HANDICAP ACCESSIBLE SPACES)

4. THIS PLAN SET HAS BEEN PREPARED BY JONES & BEACH ENGINEERS, INC., FOR MUNICIPAL AND STATE APPROVALS BASED ON DATA OBTAINED FROM ON–SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS AND LIDAR CONTOUR INFORMATION. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA AS SHOWN ON THE DESIGN PLANS, INCLUDING ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS ON THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON–SITE CONDITIONS, MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED. CONTRACTOR TO ALWAYS CONTACT DIG SAFE PRIOR TO DIGGING ONSITE OR OFFSITE TO ENSURE SAFETY AND OBEY THE LAW.

5. ALL CONSTRUCTION SHALL CONFORM TO TOWN STANDARDS AND REGULATIONS, AND NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.

6. SUBJECT PROPERTY IS PARTIALLY LOCATED WITHIN FEDERALLY DESIGNATED 100 YEAR FLOOD HAZARD ZONE A. REFERENCE FEMA COMMUNITY PANEL NO. 33017 C0211D, DATED MAY 17, 2005.

7. LANDOWNERS ARE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING PERMITTING REQUIRED UNDER THESE REGULATIONS.

8. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.). THIS DOCUMENT IS TO BE KEPT ONSITE AT ALL TIMES AND UPDATED AS REQUIRED.

9. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.

10. ALL PROPOSED SIGNAGE SHALL CONFORM WITH THE TOWN ZONING REGULATIONS, UNLESS A VARIANCE IS OTHERWISE REQUESTED.

11. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AND NHDOT STANDARDS AND SPECIFICATIONS (NON–REFLECTORIZED PAVEMENT MARKINGS), UNLESS OTHERWISE NOTED.

12. ALL PARKING STALLS SHALL BE SEPARATED USING 4" WIDE SOLID STRIPES. STRIPING SHALL BE 100% ACRYLIC TYPE, LOW VOC, FAST DRYING, IN A COLOR OF WHITE.

13. ALL STOP BARS SHALL BE 18" IN WIDTH IN A COLOR OF WHITE; ALL TRAFFIC ARROWS SHALL BE PAINTED IN A COLOR OF WHITE.

14. ALL CURBING TO BE SLOPED GRANITE WITH A MINIMUM RADIUS OF 2', UNLESS OTHERWISE NOTED.

15. ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PROVIDED BY THE OWNER. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND OWNER PRIOR TO THE START OF CONSTRUCTION. BUILDING DIMENSIONS AND AREAS TO BE TO OUTSIDE OF MASONRY, UNLESS OTHERWISE NOTED.

16. SNOW TO BE STORED AT EDGE OF PAVEMENT AND IN AREAS SHOWN ON THE PLANS, OR TRUCKED OFFSITE TO AN APPROVED SNOW DUMPING LOCATION.

17. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.

18. THE FOLLOWING VARIANCES HAVE BEEN RECEIVED BY THE CITY OF ROCHESTER ZONING BOARD OF ADJUSTMENT:
    - SECTION 275–20.2.K.3 FOR APARTMENT USE
    - SECTION 275–19.2–E BUILDING SIZE
    - TABLE 19–B BUILDNG HEIGHT

19. A CONDITIONAL USE PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN WETLAND BUFFERS.

20. THE EXISTING HISTORICAL MARKER SHALL BE RESTORED AT THE EXPENSE OF THE APPLICANT PRIOR TO THE CERTIFICATE OF OCCUPANCY.

21. A BLASTING PERMIT SHALL BE SUBMITTED AND APPROVED BY THE ROCHESTER FIRE DEPARTMENT PRIOR TO ANY BLASTING WORK.

22. ADDITIONAL CITY PERMITS REQUIRED:
    - CITY DPW STORMWATER PERMIT
    - CITY WATER AND SEWER CONNECTION PERMIT
    - CITY ROW EXCACATION and DRIVEWAY PERMIT

23. STATE PERMITS REQUIRED:
    - NHDES WETLAND PERMIT
    - NHDES ALTERATION OF TERRAIN PERMIT
    - NHDES SEWER CONNCECTION PERMIT
    - NHDOT DRIVEWAY PERMIT

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PROJECT PARCEL
CITY OF -ROCHESTER
TAX MAP 137, LOT 35-1

APPLICANT
GROEN CONSTRUCTION
120 WASHINGTON STREET
SUITE 302
ROCHESTER NH 03839

TOTAL LOT AREA
8.4 ACRES±

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.:21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/14/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

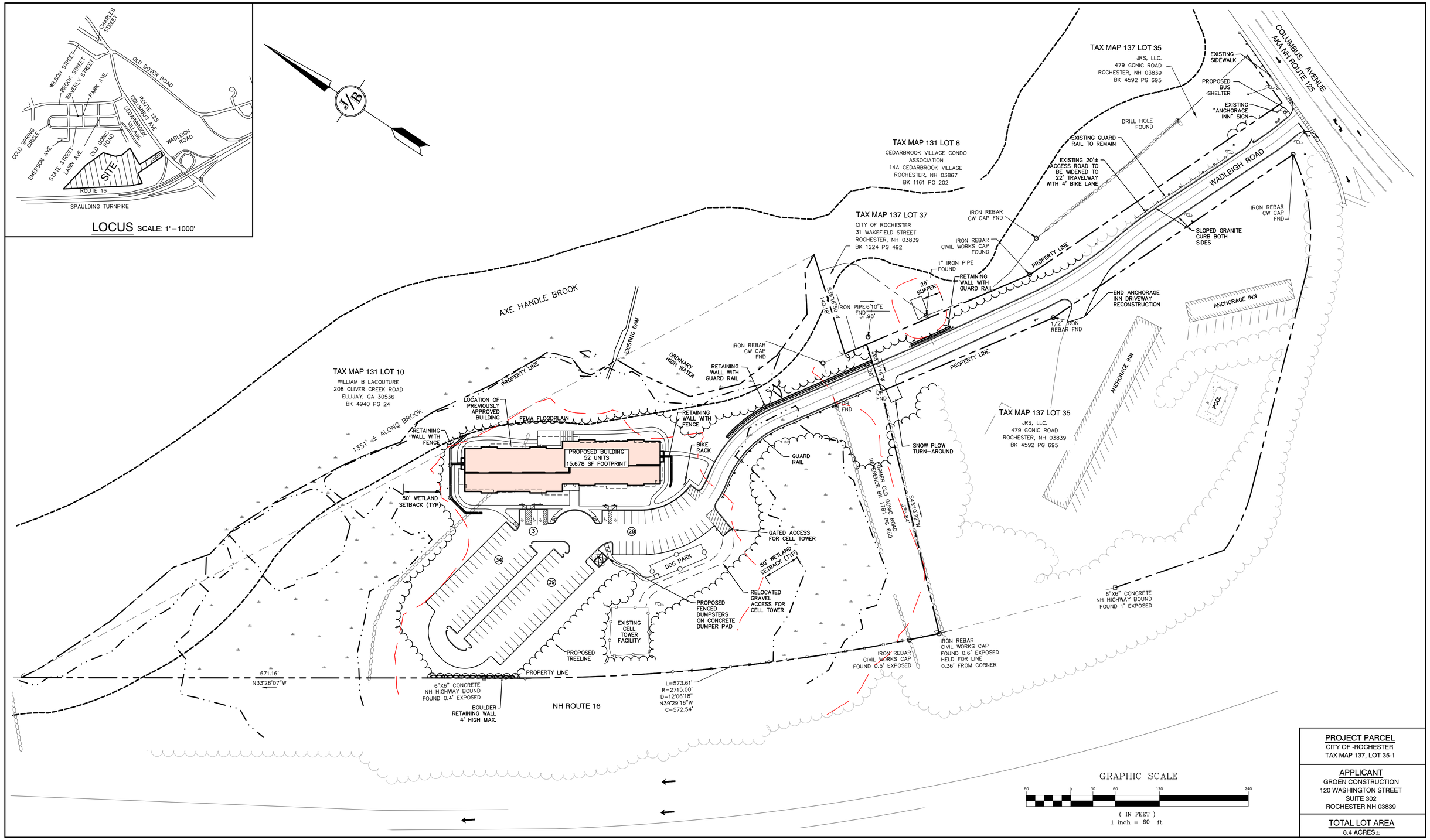
Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: SITE PLAN

Project: WADLEIGH ROAD APARTMENTS
ROCHESTER, NH

Owner of Record: SSG, LLC ATTN: FENTON GROEN
120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
PRES
SHEET 1 OF 1
JBE PROJECT NO. 21137



PROJECT PARCEL
CITY OF -ROCHESTER
TAX MAP 137, LOT 35-1

APPLICANT
GROEN CONSTRUCTION
120 WASHINGTON STREET
SUITE 302
ROCHESTER NH 03839

TOTAL LOT AREA
8.4 ACRES±

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/14/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

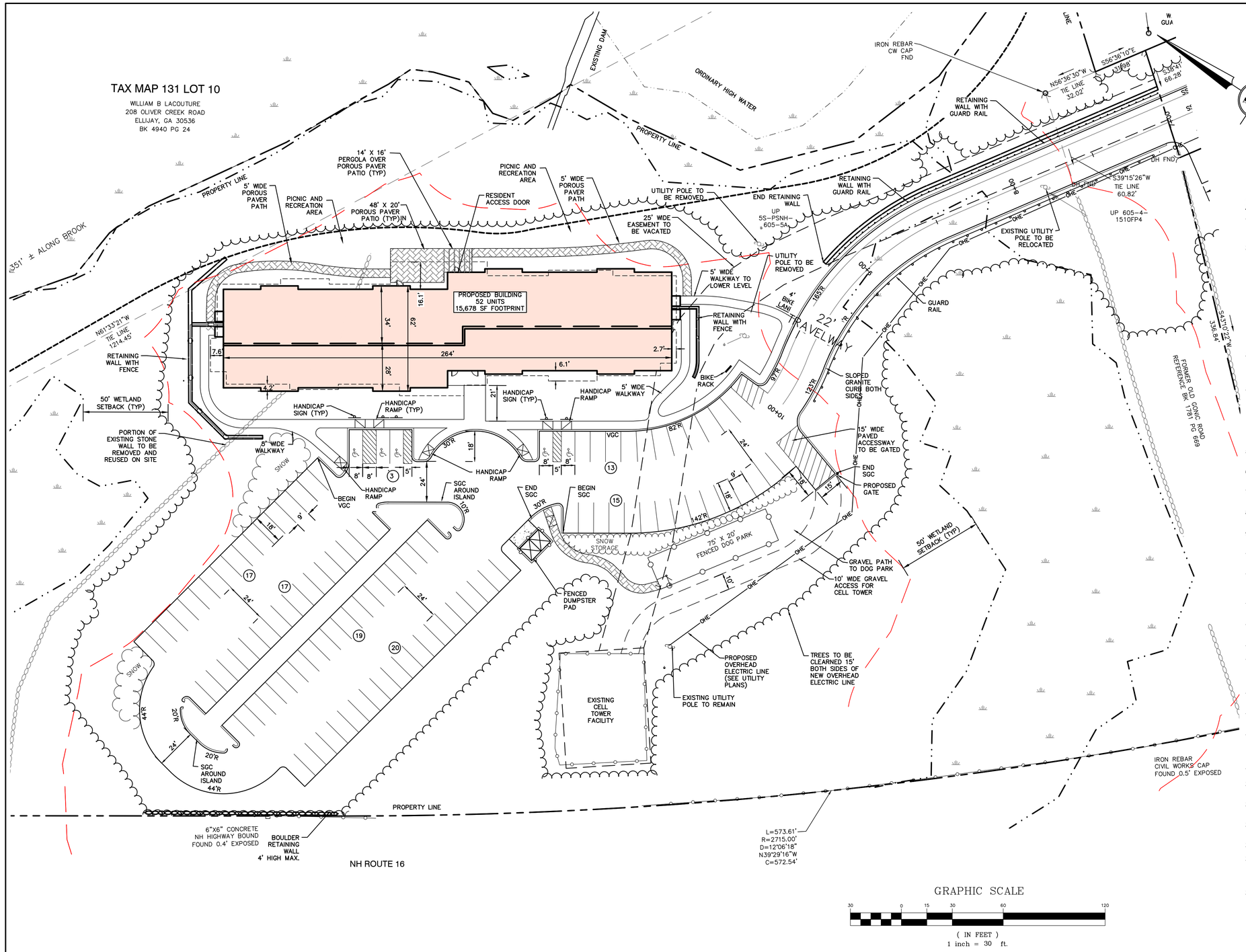
Designed and Produced in NH
J/B Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

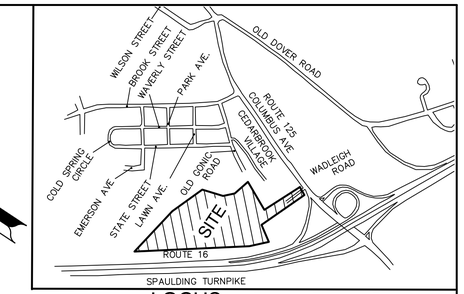
Plan Name: OVERVIEW SITE PLAN

Project: WADLEIGH ROAD APARTMENTS
ROCHESTER, NH

Owner of Record: SSG, LLC ATTN: FENTON GROEN
120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
OVRS
SHEET 5 OF 29
JBE PROJECT NO. 21137





LOCUS SCALE: 1"=1000'

SITE NOTES:

1. THE INTENT OF THIS PLAN IS TO SHOW A LAYOUT FOR A FIFTY–TWO (52) UNIT APARTMENT COMPLEX ON TAX MAP 137, LOT 35–1. ACCESS FOR THE SITE WILL BE FROM WADLEIGH ROAD. PROJECT TO BE SERVED BY ELECTRIC, MUNICIPAL SEWER & PUBLIC WATER.

2. ZONING DISTRICT: HIGHWAY COMMERCIAL
   LOT AREA MINIMUM = 20,000 SF
   LOT FRONTAGE MINIMUM = 100'
   LOT AREA PER DWELLING UNIT = 7,500 SF
   BUILDING SETBACKS
   FRONT SETBACK = 20'
   SIDE SETBACK = 10'
   REAR SETBACK = 25'
   WETLAND SETBACK = 50
   PAVEMENT SETBACKS
   FRONT SETBACK = 10'
   SIDE SETBACK = 5'
   REAR SETBACK = 10'
   MAX. LOT COVERAGE = 85%

3. PARKING CALCULATIONS:
   TOTAL NUMBER OF UNITS = 52.
   2 SPACES PER UNIT = 104 SPACES REQUIRED
   SPACES PROVIDED = 104 SPACES (INCLUDING 5 HANDICAP ACCESSIBLE SPACES)

4. THIS PLAN SET HAS BEEN PREPARED BY JONES & BEACH ENGINEERS, INC., FOR MUNICIPAL AND STATE APPROVALS BASED ON DATA OBTAINED FROM ON–SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS AND LIDAR CONTOUR INFORMATION. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA AS SHOWN ON THE DESIGN PLANS, INCLUDING ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS ON THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON–SITE CONDITIONS, MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED. CONTRACTOR TO ALWAYS CONTACT DIG SAFE PRIOR TO DIGGING ONSITE OR OFFSITE TO ENSURE SAFETY AND OBEY THE LAW.

5. ALL CONSTRUCTION SHALL CONFORM TO CITY STANDARDS AND REGULATIONS, AND NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.

6. SUBJECT PROPERTY IS PARTIALLY LOCATED WITHIN FEDERALLY DESIGNATED 100 YEAR FLOOD HAZARD ZONE A. REFERENCE FEMA COMMUNITY PANEL NO. 33017 C0211D, DATED MAY 17, 2005.

7. LANDOWNERS ARE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING PERMITTING REQUIRED UNDER THESE REGULATIONS.

8. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.). THIS DOCUMENT IS TO BE KEPT ONSITE AT ALL TIMES AND UPDATED AS REQUIRED.

9. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.

10. ALL PROPOSED SIGNAGE SHALL CONFORM WITH THE TOWN ZONING REGULATIONS, UNLESS A VARIANCE IS OTHERWISE REQUESTED.

11. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AND NHDOT STANDARDS AND SPECIFICATIONS (NON–REFLECTORIZED PAVEMENT MARKINGS), UNLESS OTHERWISE NOTED.

12. ALL PARKING STALLS SHALL BE SEPARATED USING 4" WIDE SOLID STRIPES. STRIPING SHALL BE 100% ACRYLIC TYPE, LOW VOC, FAST DRYING, IN A COLOR OF WHITE.

13. ALL STOP BARS SHALL BE 18" IN WIDTH IN A COLOR OF WHITE; ALL TRAFFIC ARROWS SHALL BE PAINTED IN A COLOR OF WHITE.

14. ALL CURBING TO BE SLOPED GRANITE WITH A MINIMUM RADIUS OF 2', UNLESS OTHERWISE NOTED.

15. ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PROVIDED BY THE OWNER. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND OWNER PRIOR TO THE START OF CONSTRUCTION. BUILDING DIMENSIONS AND AREAS TO BE TO OUTSIDE OF MASONRY, UNLESS OTHERWISE NOTED.

16. SNOW TO BE STORED AT EDGE OF PAVEMENT AND IN AREAS SHOWN ON THE PLANS, OR TRUCKED OFFSITE TO AN APPROVED SNOW DUMPING LOCATION.

17. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.

18. THE FOLLOWING VARIANCES HAVE BEEN RECEIVED BY THE CITY OF ROCHESTER ZONING BOARD OF ADJUSTMENT:
    SECTION 275–20.2.K.3 FOR APARTMENT USE
    SECTION 275–19.2–E BUILDING SIZE
    TABLE 19–B BUILDNG HEIGHT

19. A CONDITIONAL USE PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN WETLAND BUFFERS.

20. THE EXISTING HISTORICAL MARKER SHALL BE RESTORED AT THE EXPENSE OF THE APPLICANT PRIOR TO THE CERTIFICATE OF OCCUPANCY.

21. A BLASTING PERMIT SHALL BE SUBMITTED AND APPROVED BY THE ROCHESTER FIRE DEPARTMENT PRIOR TO ANY BLASTING WORK.

22. ROCHESTER DPW STAFF SHALL BE ALLOWED PERIODIC ACCESS TO THE PARKING AREAS FOR INSPECTIONS RELATED TO THE ANNUAL STORMWATER INFRASTRUCTURE REPORT.

23. SNOW SHALL BE REMOVED USING GREEN SNO–PRO TECHNIQUES.

24. ADDITIONAL CITY PERMITS REQUIRED:
    CITY DPW STORMWATER PERMIT
    CITY WATER AND SEWER CONNECTION PERMIT
    CITY ROW EXCAVATION AND DRIVEWAY PERMIT

25. STATE PERMITS REQUIRED:
    NHDES WETLAND PERMIT #2022–00563 DATED APRIL 26, 2022
    NHDES ALTERATION OF TERRAIN PERMIT
    #AoT–2182 DATED JUNE 28, 2022
    NHDES SEWER CONNECTION PERMIT #D2022–0614
    DATED JULY 19, 2022
    NHDOT DRIVEWAY PERMIT #06–389–654 DATED APRIL 7, 2022

PROJECT PARCEL
CITY OF -ROCHESTER
TAX MAP 137, LOT 35-1

APPLICANT
GROËN CONSTRUCTION
120 WASHINGTON STREET
SUITE 302
ROCHESTER NH 03839

TOTAL LOT AREA
8.4 ACRES±

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.:21137
Drawing Name: 21137-PLAN.dwg		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/14/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

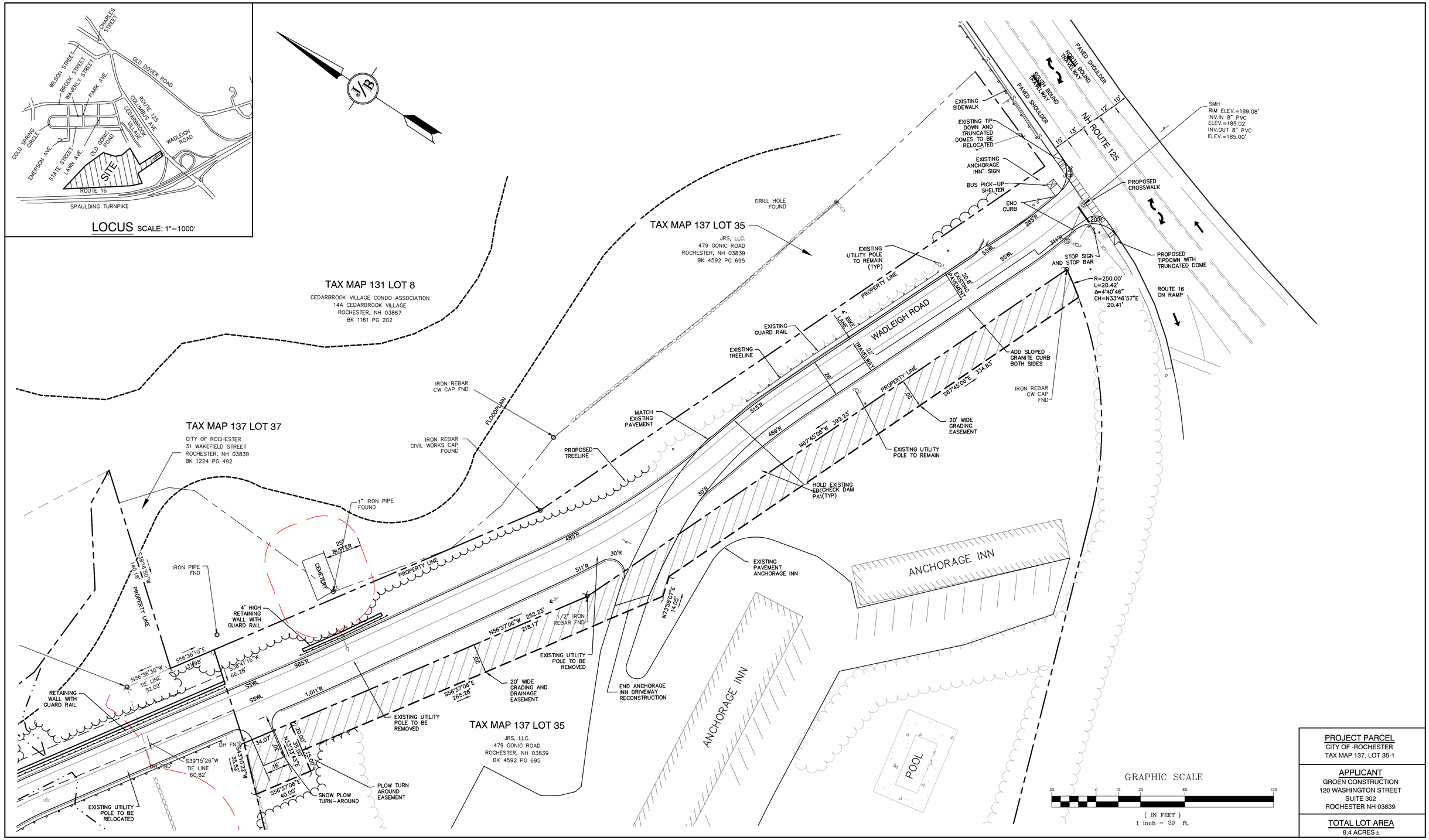
Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: SITE PLAN

Project: WADLEIGH ROAD APARTMENTS
ROCHESTER, NH

Owner of Record: SSG, LLC ATTN: FENTON GROEN
120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
C3
SHEET 6 OF 29
JBE PROJECT NO. 21137



PROJECT PARCEL
CITY OF -ROCHESTER
TAX MAP 137, LOT 35-1

APPLICANT
GROEN CONSTRUCTION
120 WASHINGTON STREET
SUITE 302
ROCHESTER NH 03839

TOTAL LOT AREA
8.4 ACRES±

Design: LAZ	Draft: LAZ	Date: 9/8/21
Checked: BAJ	Scale: 1"=30'	Project No.: 21137
Drawing Name: 21137-PLAN.dwg		

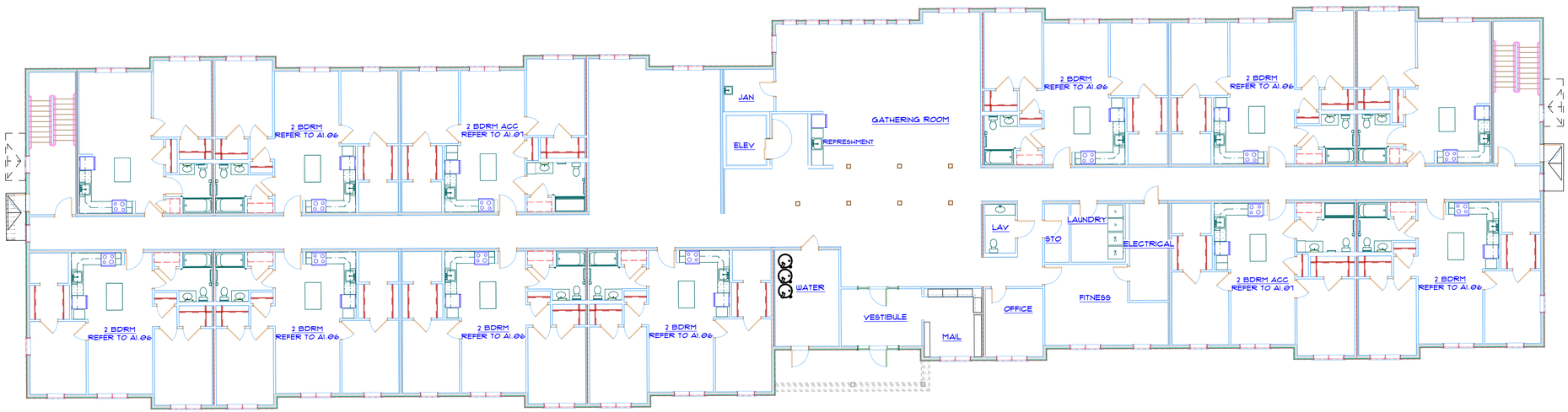
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.

REV.	DATE	REVISION	BY
11	3/14/24	ADDED LANDSCAPE AMENETIES	LAZ
10	2/15/24	REVISED SEWER	LAZ
9	2/7/24	REVISED BUILDING	LAZ
8	7/6/22	ADDED PERMIT NUMBERS	LAZ
7	6/9/22	REVISED PER AOT COMMENTS	LAZ

Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219
Stratham, NH 03885
603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

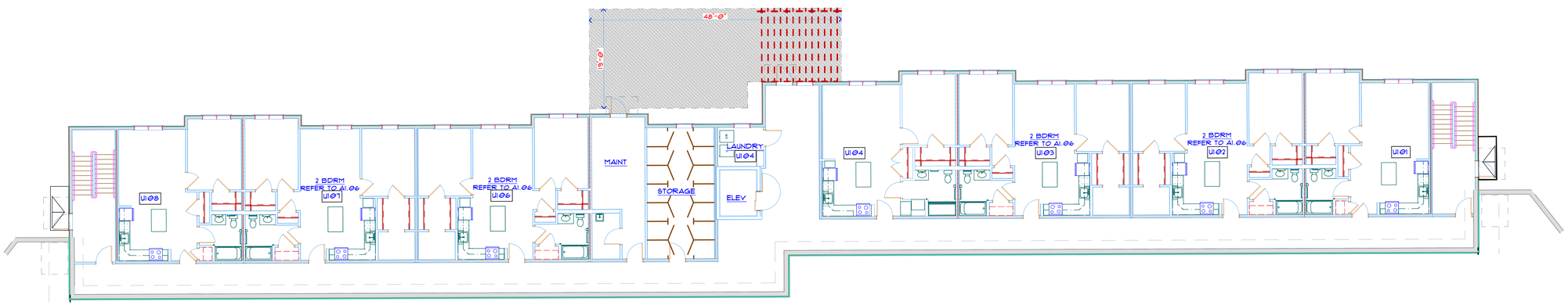
Plan Name:	SITE PLAN
Project:	WADLEIGH ROAD APARTMENTS ROCHESTER, NH
Owner of Record:	SSG, LLC ATTN: FENTON GROEN 120 WASHINGTON STREET, ROCHESTER, NH 03839

DRAWING No.
C4
SHEET 7 OF 29
JBE PROJECT NO. 21137



SECOND FLOOR PLAN

SCALE: 3/32" = 1'-0"



FIRST FLOOR PLAN

SCALE: 3/32" = 1'-0"

BURNELL JOHNSON
ARCHITECTS
80 STARK STREET
(603) 625-5038
MANCHESTER, N.H.
03101

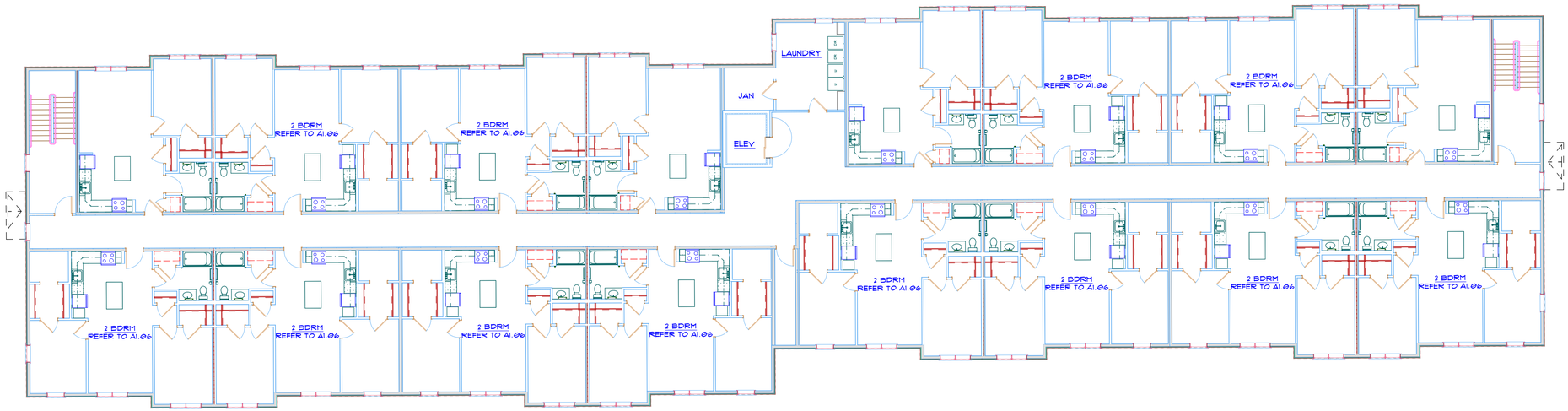
1ST & 2ND FLOOR PLANS

THE RAPIDS AT COCHECO
ROCHESTER, NH
ELM GROVE COMPANIES
HOOKSETT, NH

3/1/24

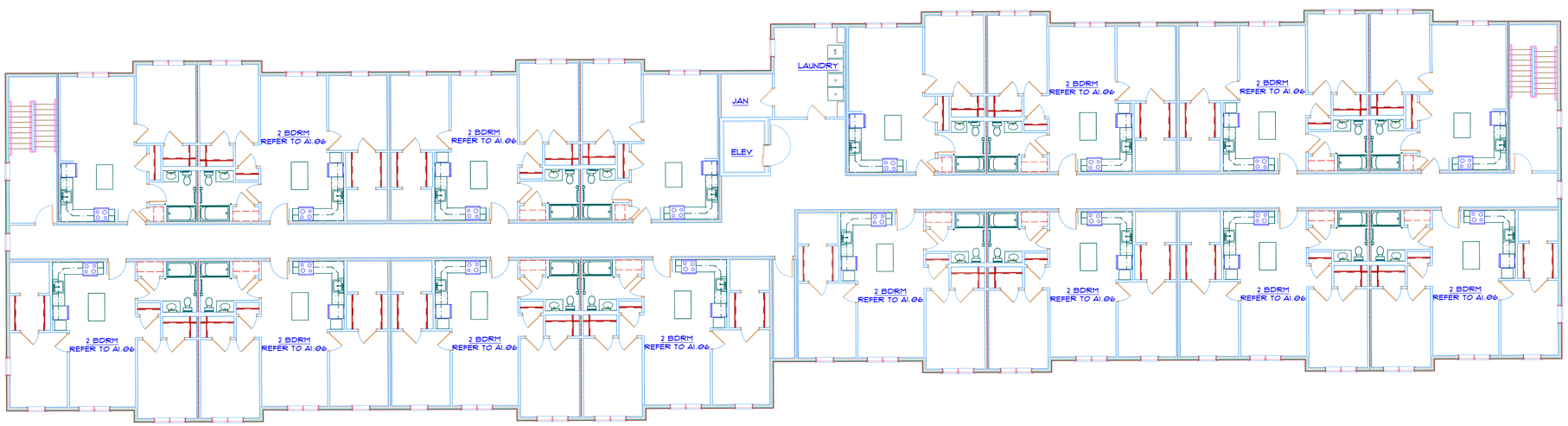
A1.01

COPYRIGHT BURNELL JOHNSON ARCHITECTS 2024



THIRD FLOOR PLAN

SCALE: 3/32" = 1'-0"



FOURTH FLOOR PLAN

SCALE: 3/32" = 1'-0"

BURNELL JOHNSON
ARCHITECTS
80 STARK STREET
(603) 625-5058
MANCHESTER, N.H.
03101

3RD & 4TH FLOOR PLANS

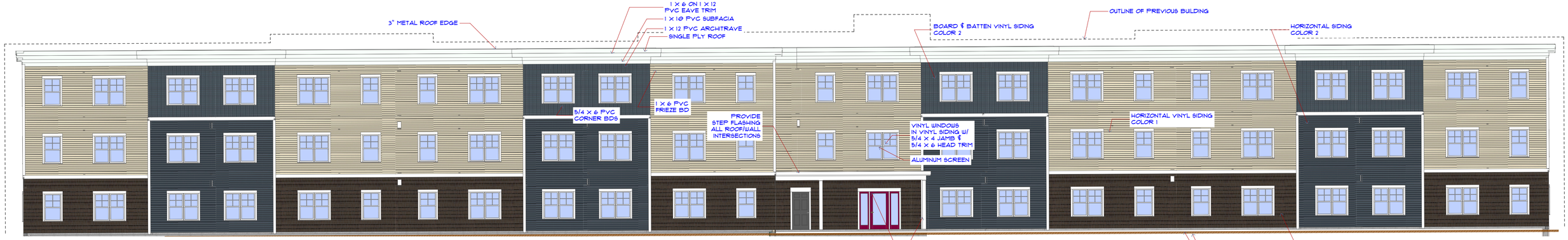
THE RAPIDS AT COCHECO
ROCHESTER, NH

ELM GROVE COMPANIES
HOOKSETT, NH

3/1/24

A1.02

COPYRIGHT BURNELL JOHNSON ARCHITECTS 2024

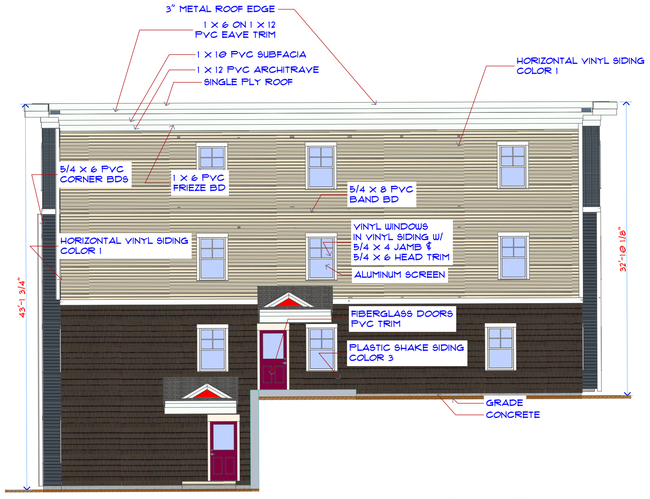


SW - SOUTHWEST EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"

NE - NORTHEAST EXTERIOR ELEVATION

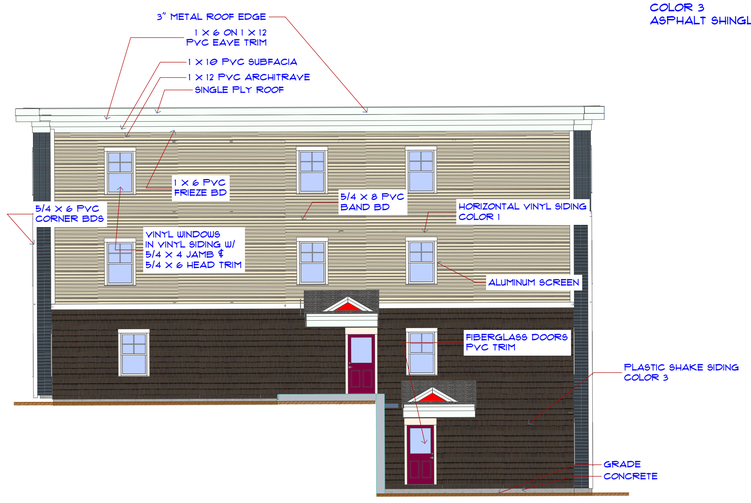
SCALE: 1/8" = 1'-0"



NORTHWEST EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"

COLOR 1	CERTAINTEED LIGHT MAPLE
COLOR 2	CERTAINTEED PACIFIC BLUE
COLOR 3	CERTAINTEED EXPRESSO
ASPHALT SHINGLES	CHARCOAL GRAY



SE - SOUTHEAST EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"

BURNELL JOHNSON
ARCHITECTS
80 STARK STREET
(603) 625-5058
MANCHESTER, N.H.
03101

EXTERIOR ELEVATIONS

THE RAPIDS AT COCHECO
ROCHESTER, NH

ELM GROVE COMPANIES
HOOKSETT, NH

3/15/24

A2.01

COPYRIGHT BURNELL JOHNSON ARCHITECTS 2024